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## THE FEEDING OF INFANTS.<sup>1</sup>

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When our worthy Secretary did me the honour to wait upon me, and, in the name of the Council, request me to read a paper upon the feeding of infants, I felt very diffident about acceding, as I thought the subject was rather hackneyed and I felt doubtful of bringing forward a paper of any interest if the subject was limited to feeding. However, I gathered that he was given no margin, so it was not for me to reason why, but only to do my best.

Every mother should nurse her baby, if only for a few months. In the fifteenth century it was the custom for suckling to continue until the child was two or even three years old. At the beginning of the eighteenth century, the time had been reduced to eighteen or twenty months, and the period has gradually been reduced until, at the present time, the period of nursing is rarely continued beyond nine months. If a woman is strong and well she should make every endeavour to nurse her child. She should make every endeavour before the child is born and during the latter weeks of pregnancy to render herself as fit and healthy as possible, in order that she may be in a condition to produce a good supply of milk. More especially should attention be paid to the condition of the nipples. If retracted and small much may be done by careful drawing or by suction cups. They should be massaged daily, dried and then some spirit applied; after this has dried, some lanoline or zinc cream should be rubbed in. If the nipples are swollen and breasts full and overflowing before the birth, the skin should be prevented from chapping by keeping them as dry as possible with some absorbent cotton wool and the application of zinc ointment. Not only is it of vital importance to the child that it should be suckled by its mother during the first few weeks of life, but also it is of serious import to the mother, for not only does it tend to promote complete involution of the uterus, but it is also attended in the majority of instances by a general improvement in health and nutrition (many women are never better or stouter than when nursing). Moreover, it is easier and cheaper, and pregnancy is less likely to occur. More mothers would nurse their babies, if they were instructed to prepare themselves for this duty. There must be some reason why so many children are, at the present time, on the bottle, and it would be interesting to hear the views of members this evening. I am of opinion that the main reason why so many women are unable to make sufficient milk to nourish their infants is to be sought in the

age in which we exist, and in the rapid rate at which we all live. We now do more and see more in a day than our forefathers would do or see in three or four. Instead of averaging five miles an hour in a horse-tram, we now average 20 in an electric. Instead of driving to town from the country by coach, we now travel three or four times as fast by train. Instead of jogging along on horseback, we are not satisfied unless we are driving in a motor-car at 30 or 40 miles an hour. Instead of walking or driving to a shop to order or buy commodities of life, we now ring up on the telephone. This all means wear and tear on the nervous and arterial systems. There is so much more time to see and do things; a restless, "jumpy" habit is established, and so even if there is the inclination and intention to suckle her baby the mother finds that, after a very few weeks, the baby is not satisfied, and fails to grow.

Some mothers, of course, are too delicate, or because of some existing disease, are unable or should be prevented from nursing; and, again, there are mothers who do not want to nurse and will, upon very slight inducement, "put the child on the bottle." If, by some mishap, a woman is unable to nurse one baby, there is no reason why she should not nurse her next. She should try to do so and not give up at once, and say "I never could suckle my children."

Seeing that it is of such vital importance that a baby should have its natural food for the first few weeks of life at any rate, statistics have shown that in a mortality of 127 per 1000 during infancy, 102.6 were hand-fed entirely or partially (92.4% entirely), while only 24.4 were infants who had been entirely breast-fed. It is really almost as great a crime to refuse to nurse a baby when the mother has the milk and the strength as it is to procure an abortion, and should be punished accordingly. When a mother can nurse her child, it should be put to the breast as soon as it is convenient. The child will not get much in the first day or two—nor will it want much—but the colostrum not only acts as a slight aperient but also is said to contain antigens, which render the blood less liable to infection. The digestive functions of a baby are very delicate, easily upset and only with very great difficulty is any disturbance overcome. In the vast majority of instances a mother's milk is the only food for a baby, all other substitutes are dangerous. When lactation is freely established, which is generally the case by the third day, the child should be put to the breast every two hours, or, if it is a feeble infant, every hour and a half. After each feed, great care should be taken to dry the nipple thoroughly. At the end of the third month, the interval of feeding can be lengthened to every three hours. It is most essential that regularity in the time of feeding should be adopted, as a baby very soon acquires habits.

<sup>1</sup> Read before a meeting of the South Australian Branch on March 25, 1915.

It is especially necessary that at night there should be a longer interval, so that the mother may get sleep. As a rule, the child should be weaned at nine months, but if it is backward, or the teeth are erupting, or the weather is hot, and if the mother is strong and healthy, suckling should be continued for another month or two. If, on the other hand, the mother is becoming anæmic and complains of weakness, headache and pains between the shoulders during nursing, the child should be weaned at once. Other reasons for weaning are active tubercular lung trouble and acute exanthems, deep fissure and ulceration of nipple, abscess in the breast, and, lastly, when the mother's milk does not agree with the child. In this last case the doctor should be absolutely certain that all means have been tried to overcome this difficulty before permitting the child to be weaned. Very often, by alteration in the mother's diet or mode of living the quality of the milk can be so improved that the baby will take it and thrive. In these cases we frequently hear the mother say it is not her milk that is at fault, as she has so much that it runs away. An analysis of the milk should be made to see where the fault lies. It very frequently happens that the percentage of fat is too high. Or the mother, having been overfed with milk and meat, the milk analysis will show a protein percentage of 3%. Limit the intake.

When it is found absolutely essential that the baby must be fed artificially, troubles commence at once. In this country, it is almost impossible to secure a wet nurse, so we need not consider this very useful substitute. The best substitute for mother's milk is cow's milk. Goat's milk is preferred by some, but the supply is limited, and there is at times a rather strong odour attached to it. Cow's milk should be administered in the undiluted state. Unless I am absolutely certain of the supply—which rarely occurs—the milk should be brought to the boil, allowed to cool and served in a bottle-shaped bottle, two grains of citrate of sodium being added for each ounce of milk.

Cow's milk is a live food, *i.e.*, it contains antiscorbutic properties. Funk has given the name of vitamins to these substances, and believes them to be crystalline in form and basic in chemical constitution. He describes also a beri-beri vitamin, which is found in the outer layer of rice. Beri-beri occurs in people who had fed on rice that had been deprived of the husk. Sterilization of the milk will destroy the vitamin.

This is the main reason why cow's milk should be preferred to any patent food or condensed milk in the market, for all of these latter are dead foods, and do not contain vitamins. The milk should be undiluted. To dilute cow's milk so as to reduce the percentage of proteins means to lower the percentage of fats and sugars a great deal too much. The average quantity of fat is about the same in human and cow's milk. Human milk contains 7% of sugar, against 4% in cow's milk. It has been found that the addition of citrate of sodium to the pure milk renders the milk easier of digestion. How the

citrate of sodium acts is uncertain; but one of the latest theories is that it forms a double salt with calcium, which, while not available for the curdling of milk or clotting of blood, is still available for other purposes in metabolism (Martin). Cow's milk contains six times as much calcium as human milk, so it is conceived that if some of this is removed by precipitation, the milk need not be diluted. The rennin of the gastric juice converts the caseinogen into soluble casein, then the calcium salts present precipitate the casein in a soluble form.

Another theory is that the citrate of sodium prevents rennet from curdling in the stomach. It has been shown that it does this in the test tube.

If undiluted milk is causing curds to be passed in the motions, then some dilution should be tried. If the motions still contain much curded milk—a few curds are not of any great significance in the first few days—and if the child is otherwise doing well, then peptonizing the milk should be tried. A measure full of Fairchild's peptogenic milk powder should be added to a pint of milk. After a few days some cream may be added in the proportion of a drachm to half a pint. The mother should be informed that food prepared in this way is only to be used for a short time, and, as soon as possible, the child must be put back on citrated milk. If the child cannot be put back, and has to go on with the peptonized milk, then raw meat juice and cream should be added, if the feeding on this kind of food has to be continued for any length of time. There is not much fear of infantile scurvy before the fifth month. But it may be found that the child is unable to digest the curd of cow's milk at all; whey should then be given. A teaspoonful of rennet will remove the curd in a solid mass from a pint of milk, the milk being warmed to 100° F. and allowed to stand. Analysis of the whey when the curd has been strained off will show that not only have the proteins been almost entirely removed, but the greater part of the fat also, so that to make a suitable food we must add to every three ounces of whey one teaspoonful of cream, one teaspoonful of raw meat juice and half a teaspoonful of milk sugar. This, of course, is a tedious business, and one that requires a considerable amount of care and skill; but, as it will not have to be kept up for any length of time, the result to be attained is well worth the trouble.

Again, as soon as possible, the child should be put back on the citrated milk, beginning by degrees, and with a small quantity at a feed. Now it may be that the child cannot digest or will not thrive on any of the foods mentioned, although I am distinctly of opinion that in the majority of instances cow's milk could have been digested by the child had sufficient and intelligent pains been taken at the commencement. Once the balance of a child's digestive apparatus is upset it is a very difficult matter to re-establish an equilibrium. It may be necessary then to try for a time one of the patent foods or condensed milk. For a time only, and only to tide over the critical time until the child can again take its live food. All these patent foods and con-

condensed milks are dead foods, *i.e.*, lack vitamins, and, if persisted in for any length of time, very grave risk of infantile scurvy is incurred. Seeing that such large quantities of these foods are in use, the question may be asked why do we not more often meet with cases of scurvy? The answer is, because these children taking these foods are not entirely limited to them. In the majority of instances they have "pieces" and are continually being given food from the table. The main use for these foods arises when fresh, live foods cannot be obtained, such as on board ship and away in the back country. The substitutes for fresh cow's milk, *i.e.*, foods used without the addition of cow's milk, are (1) the condensed milks, dried milks, such as Glaxo, Baccus Marsh, or the new preparations, Just. Hatmaker or Bévenot de Neven. (2) Dried milk, with malted starch, such as Horlick's malted milk or Allenbury No. 2. (3) Dried milk, with partially malted starch, as Carnrick's soluble food, Milo food. Of these, I never use condensed milk, except the patient is going where other foods cannot be obtained. Glaxo is a very useful food, and patients do well on it for a time. I frequently use Horlick, and also Carnrick. Babies have their likes and aversions, and one baby will like and thrive on one food, while another baby will turn from it.

Then there are the patent foods that are used with cow's milk added to them, and these are not open to the same objection as the first class, as the cow's milk supplies the vitamins. Of these, Mellin's is an example of a food containing starch completely converted, Benger's, Savory and Moore's partially converted, and Ridge's, Neave's and Robb's biscuits with starch unconverted. Of these, I use Benger's food, chiefly because, during its preparation, the food is partially peptonized. Mellin's agrees very well with some children. But the drawback to these foods is that the majority of them contain starch. For this reason also barley water which contains only a small proportion of starch is harmful, and should be avoided for children before they have cut any teeth.

Patent foods should only be used to tide over a time of difficulty, and should not be used to rear a child.

In my opinion, the next best food to human milk is cow's milk. Considering the number of children that are reared on cow's milk, it is absolutely imperative that the supply should be as pure as possible. As you know, the authorities of this city are fully alive to this necessity, and a Royal Commission has been sitting. When in England I visited the Vincent Square Children's Hospital, and was very much impressed with the thoroughness and minute attention to all details in connexion with the milk supply. The hospital has its own farm in Kent. The cows are tested with tuberculin. Absolute cleanliness is enforced, the cows groomed, udders washed, milkers scrupulously clean, etc. The milk is cooled down immediately upon being withdrawn, and emptied into special tins, air-surrounded, which keeps the milk at about 40° F. These tins

are taken to the hospital, into the laboratory, where trained nurses are constantly employed. A sample from each tin is taken, examined, and cultivations are made. The milk is then poured into the bottles of the different patients, some having more or less sugar, or more or less fat added in each individual case. The bottles are then placed in a refrigerator until required, when they are brought up to the required temperature. It appeared to me a very perfect system.

In reference to the danger of infants contracting tuberculosis from cow's milk, I believe that it is infinitesimal. Intestinal tuberculosis and *tabes mesenterica* is a very rare disease. The milk supply and delivery of a city should be on these lines. Every dairy should be kept perfectly clean and sanitary, should be under frequent inspection by skilled sanitary experts. The milk should be withdrawn and placed in special tins, of the same principle as the Thermos flasks. These should be taken in motor vehicles as quickly as possible to the receiving and delivering building, and placed in cooled rooms. The milk should then be poured into sterilized bottles, sealed and delivered in carts specially built with chambers surrounded by ice. By rigidly following out this method, the number of harmful bacteria would be reduced enormously.

This paper has dealt with the best methods, in my opinion, of feeding infants, and has not gone into the subject of diseases arising therefrom, except from the view of prevention, but perhaps I may mention one or two troubles directly arising from indigestion, such as the passage of curds, which I have already touched upon. In the first place, there is a diarrhoea with very acid motions, which excoriate the anus and buttocks. This is caused by too much sugar, and can be treated successfully by limiting the quantity of sugar and a brisk purge. Then there are the cases of toxæmia, with putrefaction, characterized by very offensive alkaline motions. These cases are best treated by stopping the casein and giving them whey and some intestinal antiseptic, such as mercury, or resorcin, or salol, after a dose of castor oil. We often see cases of children passing green motions. If some of the fæces are tested by Schmidt's process, with perchloride of mercury, it will be found that, instead of there being too much bile, there is very often an absence, and it is these cases that very often do best on small doses of *hydrargyrum cum cretâ*. I would like to mention also the cases of diarrhoea with a considerable rise of temperature of a hectic type, occurring specially in girls. These cases do not respond to treatment by the ordinary methods, but very often improve marvellously when the patients are put on citrated milk. These cases, I believe, are due to the colon bacillus affecting the urinary passages, and I would ask members to be on the look out for this affection and have the urine examined. Lastly, I would like to mention that, in my opinion, infants should not be sent to hospitals or homes if it is at all possible to obtain the necessary attention and medical advice at home. Enquiries in Italy, Germany and England confirmed this view.



## REMARKS ON INFANT FEEDING.

By **Helen M. Mayo, M.B., B.S. (Adel.),**  
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In opening the discussion on infant feeding to-night, Dr. Swift has laid down main principles, with which we must all agree.

The first step in attacking the problem must be, as he stated, the preservation to the infant of its natural food. This involves wide issues, personal, social, economic. In itself it is apparently the most simple and natural proceeding, yet, in virtue of our civilization, mothers, rich or poor, for reasons physical or economic, or both, may be debarred from this primary duty.

There is at present a reaction in favour of breast-feeding, which has led to a considerable revival. That the desire of mothers to suckle their infants is now much more general is excellent, but it serves to emphasize the fact that this is by no means always a possibility. The milk may be deficient in quality or quantity, the former leading to indigestion, the latter to starvation unless supplemented. How to remedy these deficiencies is a problem not yet solved. Each case presents its own difficulties, and, beyond advising a few simple expedients, one seems powerless to help.

The economic aspect of breast-feeding is one of great importance, and includes the teaching of midwives and nurses and the inspection of nursing homes. It must be realized that in this State, not only is the midwife uncertificated, and, in consequence, any old woman who likes may go out nursing and give supposed expert advice on infant feeding, but she may also run a nursing home for maternity cases, if her house is approved by the Board of Health. In one home where a large number of unmarried women are confined, it is the rule, whenever possible, to adopt the baby from birth, thus effectively depriving it of its natural food, and greatly diminishing its probability of life.

Even trained nurses are not always imbued with the importance of breast-feeding, and counsel supplementary feeding, or early weaning, all too lightly. It is important to remember that in this connexion the nurse has often, indeed usually, an influence greatly exceeding the doctor's, and she is usually the only trained person consulted when a change of food is required. This is indeed largely our own fault. I have heard more than one nurse say that the doctor had told her she knew much more about infant feeding than he did.

One other point I should like to mention before leaving this part of the subject is the problem of illegitimate infants. It would be a great advantage if illegitimate children could be kept with their mothers and breast-fed for the first six or twelve months, as a greater proportion of these babies die in their first year than of any other class. Since the introduction of the Maternity Allowance Act, the mothers have been enabled to enter one of the nursing homes of mushroom growth, where they are confined and kept for a fortnight, for which they pay their bonus of £5. They are then turned out to earn a living and board out the baby with a foster-mother. This custom has greatly increased

since the passing of this Act, and is, I believe, one of the dangers of such an allowance.

Leaving the question of breast-feeding, the next step is to find a suitable substitute. Cow's milk, in various dilutions, and modified in various ways, is the basis for most foods. Here, unfortunately, we are handicapped by a hot summer and a milk supply imperfectly guarded. In spite of Board of Health regulations and inspection, the precautions used in obtaining the milk from the cow are not at all times sufficient, and the mode of delivery is faulty. There are many difficulties in the way of a pure milk supply, but the need is great. In poor districts, provision is also needed for depôts or contrivances to ensure the milk being kept cool, as this is impossible in many poor homes, under present conditions, and a milk supply, if already contaminated, rapidly becomes worse, and may be a cause of acute illness.

Children unable to digest cow's milk diluted with water or modified in the usual ways come under the head of difficult feeding cases. The difficulty may arise from individual peculiarity or feeble digestion, or from previous improper feeding. The problem is often one of extreme difficulty, and, though patience and intelligent experimentation may lead to a satisfactory solution, there are cases in which every effort seems to fail.

With many of these children of feeble digestion I am sure that it is wise to be content with very slow progress at first. Even under-feeding is better than over-feeding for a weak digestion, and a prolonged course of whey, or food in weak dilution, will often be tolerated, and used, when a slight excess causes an upset and general retrogression. A safe rule in any case is to make only one change at a time, as then it is possible to interpret results with some hope of success. An intelligent appreciation of the constituents of the various patent foods is a guide to their proper use, but I should like here to protest against the exploitation of the infant by the patent food manufacturer. Advertisements are everywhere, on the hoardings, in newspapers and magazines and in our own consulting rooms. In households, where a baby arrives, they form a veritable bombardment. What wonder if mothers, who do not know better, think that one of these patent foods must be what the baby needs.

I have been much impressed by the very low percentage of mothers who give cow's milk as the first substitute for their own. It is almost invariably condensed milk. Useful as this preparation is, one cannot regret its position as the first choice in infant feeding. In many poor homes, indeed, it replaces the daily milk supply, and this cannot be of advantage, either to children or adults, unless the milk supply is very faulty.

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THE VACCINATION OF TROOPS ON A TROOPSHIP.

By **T. F. Brown, M.R.C.S., L.R.C.P.**  
(*Captain, A.A.M.C., A.I.F.*), *Ararat.*

Vaccination against typhoid fever and smallpox is much dreaded by the soldiers, so much so that it has prevented many men from arriving at the front, even after embarkation.



We medical men are agreed that it is wise and necessary to vaccinate the soldiers. The object of this short article is to give an impetus to the elaboration of a regular, and organized method or scheme for the carrying out of this work, in order that the remaining 60,000 of our troops may be saved much pain, and that the dread of vaccination may be eliminated.

Vaccination is a simple operation, causing a marked reaction. Medical officers are trained in different parts of our vast Empire, each school teaching its own methods. Therefore we find in practice that medical men have varying methods of vaccination, no doubt due to the simplicity of the operation.

Among the men on this ship is a unit of 39 from one of the States. They were vaccinated in camp before embarking, and only in four was it successful. On enquiry I find that the vaccination was performed in the majority of instances by nurses, and that no sterilization of the arm took place. The same men were injected with anti-typhoid vaccine in camp. The injections were made in the pectoral region. All the men were then given 24 hours off duty, and for several days later they complained of marked pain when moving the arm. This was no doubt due to the inflammation at the site of inoculation.

This unit was again vaccinated for smallpox after embarking. Thirty-five men presented themselves, and in 32 the vaccination was successful. Two of the three men who were unsuccessfully vaccinated on this occasion had been vaccinated with varying results on five previous occasions. I again vaccinated these three men without success.

Of the remaining men vaccinated only 1.5% from all causes were now successful. In all the successful cases each of the three places inoculated developed a pock. This average proves the quality of the lymph supplied, when care is taken in applying it.

No patient has been admitted to hospital, or been exempted from duty on account of bad arms. Four only were given light duty, and in each instance this was the first time of vaccination. I attribute this good result to an application of picric acid on the fifth day, and to strict asepsis.

Typhoid inoculation was performed on all the men on two occasions at intervals of a week. I think the abdominal wall by far the most suitable site.

The procedure I employed was as follows:—The syringe and needle were sterilized, as well as the operator's hands in the usual way. An assistant applied tincture of iodine to the abdominal wall. The vaccine was then injected. The needle after each injection was dipped into boiling olive oil, at a temperature of over 212° F., and was thus re-sterilized and lubricated. By this method much time was saved in sterilization, and the process was quickly carried out.

Since the injection was small, 5 c.cm. (the second dose a little larger), and a hypodermic syringe and needle used, it was found unnecessary to cover the actual site of puncture with collodion or plaster.

Six hours after the injection there is slight pain,

which increases for the next six hours. The skin then shows an acute localized inflammatory reaction, which slowly subsides. If the vaccine is injected in the pectoral region, or behind the scapula there will be marked pain on any movement of the arm. If injected into the lower abdominal wall the pain is only felt when rising from the sitting postures, or in the flexed position of the body. The pain is similar to that of a bruise when the patient is at rest, but if the underlying muscles are in action it becomes acute. In no case did suppuration take place. There was no occasion to exempt the men from duty as a matter of routine. Two per cent. had a marked reaction, and promptly reported themselves sick.

In regard to smallpox vaccination the procedure employed was as follows:—An assistant sterilized the arm with ether. The instrument was sterilized over a spirit lamp. The arm was then lightly scarified in three places, two above and one below, forming a triangle. In a few cases only was bleeding caused. The next step is, I think, important, that is: the lymph was well rubbed into the scarified skin for about 15 seconds. The site of operation, after a short interval, was covered with several layers of aseptic gauze. A small strip of plaster, 1/2 in. wide, was placed across the upper portion at the level of the two inoculations, and then a bandage applied. This method of covering kept the dirt out, and if the bandage slipped down, the gauze remained in the correct position.

On the fifth day the units were again paraded, the arms inspected, and painted with 3% picric acid solution in ethyl alcohol. This preparation acts like a charm, and instantly removes the irritation, and prevents the spreading of the inflammation. In a few cases a second application was necessary towards the 9th and 10th day. As I stated above, there were no bad arms, and only a slight areola of redness around the pock. In the successful cases of vaccination every place inoculated developed the pock. In no patient where revaccination was necessary was a positive result obtained.

These results speak for themselves, and in my opinion warrant a special routine method, which may be based on the lines of the above procedure, plus the experience of those who may be called upon to prepare the scheme.

#### SOME REMARKS ON OUR PROFESSION AND OUR RELATIONS TO THE PUBLIC.<sup>1</sup>

By F. Guy Griffiths, M.D.,

Honorary Physician, Royal North Shore Hospital of Sydney;  
Honorary Physician, Anti-Tuberculosis Dispensary of the  
National Association for the Prevention and  
Cure of Consumption.

I have to thank you, gentlemen, for the honour you did me a year ago in accepting me, on the nomination of your Committee, as your President.

So far as our own business was concerned, the year was a quiet one. In the upheaval of Europe, and amidst the dread horrors of war, our own affairs sank to insignificance. Four of our members, and

<sup>1</sup> Delivered at the Annual Meeting of the Northern Suburbs Medical Association, April 17, 1915.

the son of a fifth, have been on active service at the front. We lament the loss of Dr. Brian Pockley in the firing-line, and of Dr. Prevost, soon after he came back. We congratulate Dr. Francis and Dr. Studdy on their safe return. Dr. Brennand is still at sea, and, while I speak, Drs. Newmarch, W. H. Read, Basil Welch, Flecker, Ramsden, Benjafield, and our former member, Dr. Goldsmith, may be attending their wounded comrades. Drs. Phipps, David Thomas and his son, H. Thomas, and Doak are on their way to Europe, and Drs. Gother Clarke and C. N. Smith will go quite soon. We hope they may return safe and sound.

We have undertaken to conserve their interests during their absence, and to restore their practices on their return.

It is the lot of a retiring President to bore his fellows with an address; his to inflict, theirs to endure.

In casting about for a subject, I considered "The Principles of Diagnosis" and "The Relations of Philosophy and Medicine." I decided to have pity and not take advantage of my position and your helplessness. I then thought of "Summer Clothing for Sydney," but found it too light; I mean the subject, the clothing, of course, could not be. Finally, I chose "Some Remarks on our Profession and our Relations to the Public."

Our profession is designated liberal and honourable; liberal in the sense that it is free and untrammelled, owing no servile allegiance to any dogma, submitting to no Brahminical regulations of any ruling caste; not free in the sense that it is practised without any hope of gain, but liberal in the sense that it is, or at least should be, practised first and foremost for its own sake, and that it is our jealously-guarded privilege to attend without any remuneration the necessitous poor, a privilege, however, which we do not insist on exercising in the case of persons banded together in societies for mutual insurance, and which we may find it advisable to waive, should the State undertake the full responsibility for their care, so that they no longer remain penurious individuals, but become wards of a rich community.

Our profession is sometimes described as "the noblest profession"; while I hope that each of us would individually disclaim any pretensions to this title, "noble," we may yet, without undue pride, accept it for our profession as a whole. What other profession labours as does ours, to destroy its own means of livelihood? You and I may not have done much for the prevention of disease, but our profession is gradually, slowly, but surely, causing its disappearance.

Fashion exercises its influence in our ranks, just as it does in so many other spheres.

We, like the public, are liable to be led astray by new fads, and to believe the exaggerated or even lying eulogies of those who are booming new methods and new drugs.

Too often this produces an entirely wrong frame of mind. We go about looking for suitable cases on which to try a new operation or to use a new drug. We all know that our aim should be to treat the patient, to choose the remedy most suitable for the relief of his distress and his restoration to health;

we all know that at times we fall into the mistake of treating the disease and overlooking the patient; this mistake is sufficiently serious, how much more serious is it to overlook both patient and disease and to become mere exploiters of novelties?

I have said that we are too readily influenced by the blowing of trumpets to the praise of new drugs, especially new synthetic drugs, more especially new foreign synthetic drugs, and most especially new German synthetic drugs. Many of these are, of course, valuable, and we cannot afford to discard them; many, however, for example, hexamethylene-tetramine, originated elsewhere, and owe to Germany only their adoption, patent name and extensive advertisement under such patent name.

In all such cases it is our duty, in spite of the burdensome task which will be entailed upon our memories, to cease prescribing such drugs by their patent names, and to use only their chemical or British Pharmacopœial names, thus:—

For pyramidon we must learn to write	<i>dimethylaminoantipyrin</i>
" urotropine "	<i>hexamethylenetetramine,</i>
" " " " " "	which hendekasyllable has fortunately been shortened in the B.P., 1914, to <i>hexamine</i>
" heroin "	<i>diacetyl-morphine hydrochloride</i>
" aspirin "	<i>acetyl salicylic acid</i>
" salvarsan "	<i>disoxy-diamido-arsenobenzol dihydrochloride</i>
" lysol "	<i>liquor cresol saponatus</i>
" formalin "	<i>formic aldehyde (40%) or liquor formaldehydi (B.P., 1914)</i>
" trional "	<i>methyl sulphonal</i>
" veronal "	<i>barbitone (B.P., 1914)</i>
" ichthyol "	<i>ammonium ichthyo-sulphonate</i>

This substitution of unfamiliar, long names for familiar, short ones, will not be achieved without considerable pains. None the less, we must achieve it, for two reasons: First, because we must not prescribe enemy products when equally suitable Imperial products are obtainable; and, secondly, because the supply of such enemy products in Australia is limited and likely soon to be exhausted, and we should not throw upon the chemist the disagreeable task of explaining to the patient that the drug the doctor has ordered is a German proprietary article, of which there is no more to be obtained in Sydney, but that he has something English just as good or absolutely identical in constitution. The rivals of the Bayer Company say that the latter manufactures no aspirin, but simply buys acetyl salicylic acid at 3s. per lb., attaches the proprietary label "aspirin," and resells at 18s. per lb. Apparently the Imperial Government has cancelled or at least suspended the trade right to the patent names "lysol" and "salvarsan," and products of these names may now be obtained of English manufacture. Had a similar course been adopted, or had short pharmacopœial substitutes for long chemical descriptive terms been invented in other cases, as in that of hexamine and barbitone, our troubles would have been lessened.

We must help the Empire in so far as we can in this, its time of trial, but there is no need to go

the length which some have gone in decrying German science and philosophy. While I doubt if Germany has ever produced a Newton, a Kelvin, a Hume, a Herbert Spencer, a Darwin, or a Huxley, it is folly to attempt to depreciate Leibnitz, Helmholtz, Kant, Nietzsche, Weismann and Haeckel. Goethe and Schiller, if not the equals, are the near rivals of Shakespeare and Milton.

I know of no German masters of medicine who adequately compare with Sydenham, Addison, Bright, Jenner, Hunter, and Lister; but every unprejudiced observer must admit that, in bacteriology, the Germans stand unrivalled. Of course, Koch, like Lister, had the advantage of the track blazed by that giant Pasteur, but who can say that, without Koch, bacteriology would have become a science, and what other country can show a list of diseases so important as tuberculosis, cholera, typhoid, diphtheria, influenza and syphilis, whose germs were discovered by its sons? The names of Koch, Eberth, Klebs and Löffler, Pfeiffer and Schaudinn must remain forever honourable. The physician who treats his own child with diphtheria anti-toxin, however grateful he may be to Roux and Yersin, will offer no scanty meed of thanks to the genius of Ehrlich and of von Behring.

In our work we recognize no boundaries of country or colour. How noble and how astonishing is the conduct of the doctor in Robert Louis Stevenson's "Treasure Island," who at once leaves the protection of his own party's cover to succour the wounded of the blood-thirsty pirates! Nevertheless, at present, the gratification to one's professional pride and to one's feeling of humanity at the recovery of a German patient from a serious illness is tempered by some anxiety for one's country's welfare. We are held in high estimation by the public, an estimation so high as sometimes to surprise us, so high that the public are sometimes disappointed when we fail to fulfil their exaggerated expectations. Physicians who have practised in the country will remember the multiplicity of matters of public interest, apart altogether from medical practice, on which their advice is sought. In a country town, no public committee is considered complete unless the doctor serves upon it.

This good repute we should labour to deserve, we should attempt to set an example of high standard in every department of life, even in letters. We should endeavour to express in correct, if not in elegant language, the transactions of our societies, our records of cases and other contributions to medical journals. We cannot hope to attain the literary renown of our colleagues, Goldsmith and Sir Thomas Browne, two great ornaments of English prose, much less of Rabelais, one of the world's immortals, but what we do write we should write in clear, sound English. I wonder how many of us know any of the work of the present poet laureate, Dr. Bridges? He who spends a few hours conning Bridges' collected shorter works, will be rewarded with some of the daintiest and most delightful lyrics in the English language, love poems breathing the tenderest passion in the most beautiful verse.

We owe it to ourselves and our fellows to be familiar with the names of medical men who have distinguished themselves in other sciences, such men as Thomas Young, Helmholtz, Huxley and Sir Ronald Ross, the last so ill-requited by an ungrateful nation for such valuable labour.

Among workers in non-medical affairs may I be permitted to mention the late Henry Jones (Cavendish) the pre-eminent writer on games of cards, a subject for which I have a particular affection?

It behoves us to take the lead, not only in all matters appertaining to public health, as, for instance, the reduction or cessation of alcoholic drinking, the preservation of public parks, the prevention of disease and misery, perhaps even by such measures as the dissemination of a knowledge of the prophylaxis of syphilis and the means for lightening the burden imposed by the curse of Eve, but also in all matters of general progress, such as the adoption of the metric system of weights and measures and of simplified spelling, which may relieve our children of many weary hours of degrading toil.

We should adopt a high standard of honesty and integrity, not only in our particular professional relations with our patients, but in abstaining from any association with advertising quacks, medical clairvoyants, physical culture experts who treat patients, proprietors of alleged panaceas, of secret remedies and of over-vaunted patent foods, professors of priestly magic and of Emanuel and other spiritual healing movements. In my opinion, it is equally important to exclude advertisements of all of these, as of homœopathy, from the columns of medical journals.

While we should be careful to give not the slightest suspicion of support to any such practices, not to countenance them in any way, yet I do not think that we should attempt to have them made illegal, or to claim any special public protection or privilege for ourselves. We know, of course, that the "monopoly" of practice which laymen so often assert we enjoy is purely imaginary, and while I think that improvements in medicine, for example, the long-hoped-for cure for cancer, are likely to be discovered by some of our own number, if at all, yet there is a possibility of a lucky shot by some ignorant outsider—it was a buccaneer who first compounded "Dover's powder," nearly two hundred years ago—and while it is desirable that the public should be educated to realize as completely as possible the folly of dependence on the advice and treatment of untrained persons, yet I do not think it certain that the prohibition of medical practice by unqualified persons would prove to the ultimate benefit of the human race; and for two reasons, first because, as our great English medical historian, Dr. F. J. Payne, has said, "The great advances in medicine have generally resulted, not from direct endeavours to improve the art, as practical men suppose, but from some external influence, often from some great movement in science or philosophy." Remember, the value for medicine of the work of Pasteur, the chemist who founded bacteriology, of Röntgen, the physicist, and of Sir William Perkin, another chemist, who extracted aniline dyes



so valuable in pathology, and gave the stimulus to the production of synthetic drugs. Secondly, because competition, even contemptible competition, from without tends to prevent a cramping stiffness and lethargy and to urge us to new conquests.

Ignorant "bone-setters" taught us the harmfulness of long-continued immobilization of fractures and sprains, herbalists the danger of excessive doses of mercury, homœopaths the value of careful nursing.

The public entertain entirely illusory ideas of our work, and it is our duty quietly to disabuse their minds. They often think that we possess marvellous knowledge and powers of which we really fall far short, and when we fail, as fail we must in difficult cases, they are shocked and hurt, and bring against us unwarranted charges of neglect and malpractice. It is not only right but it is wise in our own interests that we should admit the limitations of ourselves and our methods, our inability to see the inside of the body with or without X-rays, our inability to recognize all pathological constituents of the urine even with the most delicate chemical analysis; our inability to produce a complete cure, *restitutio ad integrum* in any case whatsoever; our inability in the majority of cases to do more than assist nature. It has always seemed to me strange that, while the physician is ready to recognize his dependence on the *vis medicatrix nature* (νόστος φύσις ἰατρός), the surgeon is less ready to do so, and yet the latter depends upon it even more than the physician. Do his sutures appose the margins of a wound permanently, or for a few days only? Does he ever do more than clear the path for the natural process of healing?

Another misconception that is commonly entertained is that our art is perfected and complete, that there is a correct treatment for every malady, and that every other but this one treatment is wrong. On the contrary, our art is incomplete and progressive; for many affections there are diverse methods of treatment, none of them the best; these are, by experiment, being gradually improved. Such experiment should, if the public allow it, be undertaken at first always on animals; when it is necessary to test new methods on human beings, our members have always been ready to offer their own bodies, witness John Hunter inoculating himself with the pus from a venereal sore, and Manson, junr., submitting to the bites of malarial mosquitoes.

The element of uncertainty associated with our most delicate measures makes it necessary for us carefully to avoid excessive dogmatism, and makes it very wrong to compel people by law themselves or their children to submit to any measure, however well established. If a man distrust vaccination or the injection of anti-toxic serum, we have no more right to compel his submission to it than to any religious rite; religious practices now recognized as utterly fallacious have been in the past considered by all the authorities and almost all the people of some countries as absolutely perfect and necessary for universal application. As we claim tolerance in matters religious, so let us be tolerant of others' opinions in medicine, even if we are convinced they are erroneous. The priest was as honest in his

opinion that free-thinkers spread moral contagion as we are in ours that the unvaccinated spread variola.

I abhor the medical tyranny that would compel a man to submit his child to a hated operation, and I abhor the oft-repeated lie that such and such a procedure is "perfectly safe."

Once we were told that anti-toxic serum was absolutely harmless, now we know that horse serum often produces slight symptoms of ill-health and sometimes kills. We must all know of deaths caused by the "perfectly safe" operation of curetting the nasopharynx for adenoid overgrowths, or by the administration of "perfectly safe" anæsthetics. The most eminent surgeon of Australia told me he had lost a child by hæmorrhage after circumcision.

Gentlemen, I say none of these measures is perfectly safe; but I do not undervalue them; I strongly approve of all, in spite of the slight risk they entail, and I have adopted all of them freely and repeatedly in my own family. What I do decry is the wicked exaggeration that they are without danger.

Let us labour to improve them, to make them less and less dangerous, keeping ever in mind the first principle of our art, *primum non nocere*, above all, do no harm.

## Reviews.

### ABDOMINAL SURGERY.

Moynihan's work on abdominal operations<sup>1</sup> has reappeared in its third edition. The original purpose of this book is adhered to, *viz.*, to give an outline of those methods practised by the author. No extensive bibliography is given, but in many places the original author of a point in technique is quoted verbatim. Moynihan is a convert to Crile's anoci-association, which is in essence, local combined with general anæsthesia; yet up to last year Crile had not convinced many of his leading colleagues in the United States of America. They have adopted an attitude of "not proven." A short account of Crile's technique is given. A general account of the technique of abdominal surgery is given; then follows the description of operations on individual organs. Amongst the many excellent illustrations, those of Monks, giving the arterial supply of the small intestine, are reproduced. These are a distinct help to the recognition of different parts of this portion of the bowel. Jamieson's and Dobson's illustrations in colour of the blood and lymphatic supply of the large intestine are also given. The printing and binding are up to the well-known standard of W. B. Saunders Company. Although not much new matter has been added, yet the publication is so well known that it has long since established itself as a standard work of reference.

### WESTERN SUBURBS HOSPITAL, SYDNEY.

On April 24, 1915, we called attention to the financial embarrassment of the Cottage Hospital at Croydon. A meeting of the Hospital Committee, held on April 23, 1915, was attended by the mayors of the municipalities served by the hospital, and a discussion of the position took place. The opinion was expressed that the falling off of subscriptions was largely due to diminished activity in the affected districts. It was decided to form permanent ladies' committees in each district for the purpose of collecting subscriptions for the hospital.

### QUEEN'S MEMORIAL INFECTIOUS DISEASES HOSPITAL.

It is announced that an isolation block, which is urgently needed for the Queen's Memorial Infectious Diseases Hospital, Melbourne, will be erected within a short time. The building is to cost £2,600, to include water supply, house drainage and electric light.

<sup>1</sup> Abdominal Operations, in 2 vols., by Sir Berkeley Moynihan, M.S. (Lond.), F.R.C.S., Leeds, England; Third Edition, revised, 1914. Philadelphia and London: W. B. Saunders Co.; Melbourne: James Little; Svo., Vol. I., pp. 488; Vol. II., pp. 492; illustrated. Price, 44s. net.

## The Medical Journal of Australia.

SATURDAY, MAY 1, 1915.

### Doctors for the Front.

The great army, which is preparing to leave Great Britain for the western theatre of war, or maybe has already left, together with the army, which Britain sent to the front long since, will require a large medical equipment to undertake the care of the sick and wounded and to deal with the manifold exigencies of the campaign. The supply of medical men is limited. In the United Kingdom there are 30,309 medical practitioners for a population of about 36,000,000, and therefore there is less than one practitioner to each 1,000 individuals. The military authorities are careful not to rob the civilian population of its medical attendance, but in the need for more doctors for the front, seek north, east, south and west for suitable men. In the *British Medical Journal* of March 13, 1915, Sir Alfred Keogh, the Director-General of the Army Medical Services, asks for volunteers. His appeal is urgent. The conditions imposed are few. "At present," he says, "we are not, except in special cases, sending men of over 40 years of age overseas, but we should gladly take on older men for home service." Again, he says, "We would give suitable men immediate employment.

A short time ago we reproduced a cable received by the Attorney-General of South Australia, asking for more volunteers. A special and urgent call for 100 men to serve with the Royal Army Medical Corps, with the rank of lieutenant, was responded to within a very short time, and we are informed by the Director-General of Medical Services that more are now needed. Moreover, the War Office authorities in London endorse the call for men, and ask those willing to volunteer to apply directly to the P.M.O. of their District, or by cable to the Imperial Government.

Within the Commonwealth, a further call is being made. Last week we published the preliminary details concerning the new double hospital which will be sent out from Australia, with 32 medical officers. Since then we have learned that 20 or 25 medical

practitioners are required in addition. There is therefore no doubt as to the real urgency of the message, asking for doctors to serve. In the Commonwealth, the military authorities have received applications from a number of suitable men, and many are waiting their turn for selection. Specialists and surgeons of wide experience, we understand, are not plentiful, and it is just this type of man who can be of the greatest use.

In the circumstances, we would appeal to medical practitioners who can arrange to leave their homes and practices, to join either the Australian or the Imperial Medical Services. The choice is not difficult to make. Men under 40 are eligible for both, but the P.M.O. will be in a position to advise whether their services are required in the new hospital or not. For older men of wide experience, application should be made for joining the Australian Army Medical Corps. A correspondent recently pointed out that applications do not always meet with response on the part of the District P.M.O. Should any undue delay arise in the acceptance of the proffered service, the practitioner has always the alternative of cabling to the War Office, in London, where, according to Sir Alfred Keogh, all men who are physically fit and are willing to serve will be given immediate employment. In the present national emergency, the practitioners of Australia will bear their portion of the burden and help to safeguard the interests of Empire and provide the necessary medical attendance to the soldiers on the field.

### INFANT FEEDING.

The discussion on infant feeding at a meeting of the South Australian Branch of the British Medical Association, held on March 25, 1915, should serve a highly useful purpose to general practitioners throughout the Commonwealth. This subject is one which is not taught as it should be taught to medical students at the Universities. The practitioner is compelled to glean knowledge from experience, and is often hard put to determine what should be done in a difficult case. Dr. Helen Mayo referred to the fact that medical practitioners frequently leave the direction of the feeding of the infant to the nurse, because they feel that she knows better than they do. The late Dr. Matthews Duncan used to teach

his students always to be prepared to learn about the care of the lying-in woman and her infant from an experienced monthly nurse, but he used to add: "Never let her know that you are learning."

One or two salient points emanate from the discussion, to which it may be well to direct attention. Dr. Swift and all the speakers who followed him were in accord that breast feeding is by far the best for the infant. But the majority was impelled to admit that a considerable number of mothers were unable to feed their babies. Dr. Hone has attacked the problem at its root, and has endeavoured to make it quite clear why some mothers fail in this natural act. Budin, of Paris, whose management of infants was exceptional, rarely failed to place a mother in a position of feeding her infant with satisfactory results, when he had the chance of directing her habits during the latter months of pregnancy, and of controlling them during lactation. The advice so readily given by doctors and nurses to hand-feed a baby is usually bad, unless a really scientific and earnest attempt has been made to improve the mammary secretion beforehand. In the interests of Australia's babies, the members of the medical profession should strain every nerve to gain that experience and skill necessary to achieve this end. Experience elsewhere teaches that judgement, knowledge, and tact suffice to starve the manufacturer of infants' foods.

The second point worthy of serious consideration deals with cow's milk. It is usually regarded that cow's milk is quite unreliable, because of the possibility of contamination. Reference was made to the precautions taken at the Infants' Hospital in St. Vincent's Square, Pimlico, in London. The plan on which the milk is said to be collected, stored and delivered is excellent, on paper, but there appears to be some doubt whether in practice these precautions are carried out accurately. It is extremely difficult to train dairy employees to carry out instructions literally, and instances can be quoted in which the most elaborate precautions were taken by the milkers in regard to the washing of the udders, the wearing of sterilized gowns, and the washing of hands and forearms prior to the milking, and yet just before the actual milking was begun, habit proved too strong—the milker moistened his hands by spitting on them. But given a clean dairy, and

strict supervision, a good milk, suitable for children, can be obtained. The best means of insuring that the milk is clean is to cause a sample to be submitted at frequent intervals to analysis. In the first place the straining cloth, which must be sterile before use, should not be visibly discoloured; next, the bacterial count should be low and comparatively constant; in the third place, the centrifuged deposit, when injected subcutaneously, should not produce tuberculosis in guineapigs; and, lastly, the chemical and physical analysis should prove that the milk is rich and not adulterated. If such a milk be placed within 15 minutes into sterile glass bottles, sealed and cooled, no fear of contamination is justified. It lies within the power of a group of medical practitioners to make arrangements with a dairy proprietor that if he can demonstrate that his milk is properly handled in this way, all their patients will be advised to buy it.

There is one other matter to which attention should be called. Infants' foods are regarded as advisable at times. It is undeniable that infants have a distinct, albeit small, power of digesting starch. While foods may be found useful in tiding infants over a critical time, it is doubtful whether they can ever be regarded as satisfactory forms of diet. But one thing is quite evident. There is no need for the large variety of foods now on the market, and Dr. Helen Mayo is wise in protesting against the scandalous manner in which the advertisements of these preparations are brought to the notice of mothers. In this connexion, a curious regulation has been issued under the Food and Diet Act, 1908, of South Australia. Under the heading Infants' Foods, it is ruled that any infants' food containing starch, of which 50% remains unconverted when the food has been prepared as directed, the food shall be labelled "Not suitable for infants." The manufacturer of infants' foods who would label his goods in this manner has yet to be discovered.

#### LODGE PRACTICE IN WARWICK.

The first object of the British Medical Association, according to its Memorandum of Association, is the advancement of the scientific and social work of the profession, and the second the guarding of its honour and interests. A liberal interpretation of these aims may be taken to be that the British Medical Association undertakes to assist its members to render



the best scientific services to the public. By doing this, it is essential that the members shall display a loyalty to the Association. Good medical service can only be rendered if the conditions are satisfactory alike to the doctor and to the patient. The British Medical Association has been called a Trades Union, because its members have held together for the purpose of attaining this end. But the principles underlying trades unionism are lacking; doctors do not clamour for a minimum of work and a maximum of pay; nor is the effect of the intervention of the British Medical Association diminished efficiency.

No better example of the value of the united action of the medical profession can be cited than that of the recent events at Warwick. There are six medical practitioners who are all members of the Association. A short time ago, the same conditions in regard to lodge practice obtained in Warwick as elsewhere in Queensland. The medical officers were required to give attendance at a low rate of remuneration, and under conditions which were unsatisfactory. In November, 1913, the Warwick Friendly Societies, in response to the action of the British Medical Association in the State, determined to obtain the services of whole-time medical officers, who, being debarred from private practice, would be able to devote their whole time and energies to the treatment of the lodge patients. This arrangement was adopted in response to a circular sent to every lodge member. Ninety-two per cent. voted in favour of it. The medical officer was to receive £1,000 a year, and was to provide out of this sum a capable assistant. The practitioners of Warwick considered the proposal, and decided against it, inasmuch as it was regarded as being inimical to the best interests of the medical profession. The matter was referred to the Council of the Queensland Branch, and the decision was upheld. It therefore became necessary to inform members of the British Medical Association that the acceptance of the post was incompatible with continued membership of the Association. All the Warwick men resigned their positions, and intimated to the Warwick Friendly Societies' Association that the only conditions of service which they would accept were those included in the Common Form of Agreement. The resignations were accepted, and the Friendly Societies obtained the services of a Dr. Ramage, who was in New Zealand. To demonstrate their jubilation at having forced the local practitioners into a corner, the members of the Friendly Societies met the new doctor with bands playing, a Mayoral reception, and an afternoon conversation were held in his honour, and true Australian welcome and hospitality were exhibited. Dr. Ramage acted for a period of six months, but long before the expiration of this period, some of the members recognized their mistake. From the evidence given in a case in which the Warwick Friendly Societies' Association claimed compensation for an alleged broken contract (see *The Medical Journal of Australia*, March 20, 1915, p. 275), it was admitted by the Secretary of the plaintiff Association that this gentleman had "only been drunk twice." The Friendly Societies' Association then engaged the services of a Dr. Sleeman, who at the time was in

Kangaroo Island. Some delay was occasioned in his arrival, in spite of repeated telegrams announcing it. This gentleman was tolerated for a period of three months, and then a Dr. Murray Laffan was appointed. It was brought to the latter's notice that his continuation in office was not in the interests of the public or of the profession. After about three months' service, he resigned. After each medical officer was permitted to resign, the Warwick Medical Union was invited to say on what terms its members would be willing to enter upon an agreement with the lodges. On each occasion the reply was "the terms of the Common Form of Agreement." The bone of contention was the income limit clause. No objection was raised to the capitation fee or to the other provisions. The contention of the Friendly Societies' Association was that the recognition of the income limit clause would mean an admission of pauperization. After Dr. Laffan had left, the lodges were without a medical officer, and the six practitioners attended the lodge members as private patients, the Societies paying the full fees. They were in clover; but this could not last. Early in March, 1915, the Warwick Friendly Societies' Association again approached the Warwick Medical Union. Negotiations were opened, and, within a short space of time, the Common Form of Agreement was signed, dated April 1, 1915. The lodges have agreed to pay 25s. per member, and £3 3s. for confinements.

Six months prior to this final agreement, the Samaritan Lodge of the Protestant Alliance severed themselves from the Friendly Societies' Association, and appointed four of the local doctors as medical officers of the lodge. The capitation fee was 25s. and the midwifery fee £2 12s. 6d. A provision of the agreement postponed the commencement of the increased fees until the termination of the war.

This history shows that even a small band of men, working loyally together to the advantage of their profession and of the patients they are called upon to attend, can enforce reasonable terms of contract practice, provided that all the men are prepared to suffer pecuniary loss for a time, and provided that a powerful organization is present to assist them by keeping the field clear. The importation of men from outside has been resorted to on many occasions, but is doomed to failure, because no medical man, who has the welfare of the profession and of the public at heart, will accept terms which have been refused by the men practising in the district.

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#### FEES FOR MEDICAL WITNESSES AT INQUESTS.

The Coroners' Act, 1898 (New South Wales), is an antiquated measure, in so far as it is practically identical with a previous Act passed about the year 1838. One of the anomalies contained in the Act has reference to the scale of fees for mileage to medical witnesses. The injustice to the doctor was overcome to a certain extent by the issuing of a regulation on September 8, 1909, which provided for the payment of five shillings per mile travelled on the outward journey after the first mile and up to the fifth. For distances over five miles, the mileage

fee was seven shillings per mile. This concession is somewhat discounted by a reduction of the fees in the case of journeys made wholly or in part by rail, in which cases only one-fourth of the rate was paid. Moreover these fees were held to cover the whole expense incurred on the journey. In order to obtain these fees, the witness was required to hand to the Coroner a written statement of the number of miles travelled by him, the number of hours necessarily spent away from home, and a list of out-of-pocket expenses incurred on the journey, with a view to his special remuneration. The Coroner, who received this statement, was directed to examine it, to certify to its correctness by countersigning it, and to forward it to the Chief Medical Officer of the Government. If the witness failed, through forgetfulness or ignorance of the provisions, to hand in the statement, he did not receive any mileage fees.

This regulation has now been repealed, and a fresh one substituted (April 14, 1915). The new regulation is as follows:—

### *XIII. Mileage.*

The following shall be the rates allowed for mileage:—

One mile or under from the medical practitioner's residence, Nil.

Over one mile, five shillings a mile.

For journeys made, or made in part, by rail, one-fourth only of the above rates shall be paid in respect of the distance so travelled.

The above mentioned rates shall be paid for one way only, and shall cover cost of conveyance and all incidental expenses. The distance actually travelled shall alone be claimed for.

The clause to which this refers is as follows:—

### *Fees to Medical Witnesses.*

Fees to Medical Witnesses at Inquests or Inquiries for giving evidence and making post-mortem examinations, and mileage for travelling to attend the Court.

In accordance with the provisions of section 10 of the "Coroners' Act, 1898," the remuneration allowed to legally qualified medical witnesses at coroners' inquests and magisterial inquiries is as follows:—

"For giving evidence, £1 1s.

For making post-mortem examinations, £2 2s.

\*For mileage under 10 miles from residence, Nil.

\*For mileage above 10 miles from residence, 1s. per mile—one way only.

Provided that where the death has happened in any public hospital, gaol, or other public building, no medical officer appointed with salary to attend such hospital, gaol, or building shall be entitled to any such remuneration."

\* Note—In lieu of mileage herein provided, medical practitioners will be allowed mileage in accordance with special Regulation XIII.

### *Certification of Claims, etc., by Coroners.*

Coroners shall forward direct to the Chief Medical Officer of the Government, at the close of the month of service, properly prepared, all claims for medical witnesses, and shall furnish him, when called upon, with any information he may deem necessary to enable him to deal with such claims.

It will be noticed that, while the medical witness is no longer required to hand in a written statement, but will be asked at each inquest to fill in and sign the usual voucher, the rate of fees for mileage has been altered in so far as journeys of over five miles are concerned. The effect of the new regulation will be a distinct advantage to the practitioner, because he will receive payment for mileage in all cases in which he travels more than one mile to attend the inquest. Why the seven shilling fee should have been reduced to five shillings is not clear, nor can it be held that the one-quarter rate, when the witness travels by rail, is generous. There are two things involved; the repayment of out-of-pocket expenses and the payment for lost time. If mileage fees are cut down when men travel by rail, compensation for time lost should be allowed.

### *DISPOSAL OF GARBAGE IN SYDNEY.*

The ways of the Sydney City Council are wonderful. Having been driven by public opinion and by the obvious results of its own mismanagement to find improved methods of disposing of the garbage of the city, it lulled the public into a sense of security by what had the appearance of a comparatively vigorous action. But this was illusory. In reality, the subject was being considered at leisure, habitual to the Council, and, after the course of many weeks, a recommendation of the Health Committee reached the Council on April 20, 1915, upsetting practically all the seeming intentions of the Council. To the suggestion that all the refuse should be incinerated, the Health Committee wishes to except gully soil and street sweepings. To the suggestion that the destructors in use at present should be worked at a lower rating, the Committee has determined that this is unnecessary. To the third suggestion that a new six-cell destructor should be erected at Camperdown, the Committee considers this also to be unnecessary. To the fourth suggestion that the Moore Park destructor be equipped with modern flag-making plant, mortar mills, etc., the Committee replies that the cost is prohibitive. To the fifth suggestion that the feeding and charging methods at Pyrmont should be rearranged, the Committee expresses the opinion that there is no reason why this should be carried out. The City Council, with a promptness in keeping with its reputation, felt no hesitation in referring all these counter-suggestions back to the Health Committee, presumably for the purpose of wasting time. The City Council is no doubt a very excellent body for regulating the traffic in Pitt and Castlereagh Streets, but it has no hygienic conscience. If it were not a serious matter, it might be regarded as amusing to learn that the Committee and the Council are quarrelling over the disposal of the street sweepings, inasmuch as the only efficient brush used is the wind and the only effective sluice, the rain. Certain reforms of the Council are needed. The first in logical order would be the renaming of the Health Committee.

### *THE MALARIA DANGER.*

We have been informed from a reliable source in South Australia that, on the return of the troops from New Guinea, an examination of some 120 men

was carried out. It appears that of this number 111 had suffered one or more attacks of malaria. Many of the men had had two or three attacks, and in a few instances eight or nine attacks had taken place. That only nine out of 120 men had remained free is evidence of the extent of the infection in New Guinea and of the absence of prophylactic measures. From the same source we learn that, in spite of the fact that mosquito nets were provided, no instructions were given to the men to enable them to protect themselves, and the importance of using the nets was not insisted on. Moreover, the patients were not treated in a manner usually adopted in febrile cases. The malaria patients were given the same diet as the other men. This consists of bully beef and biscuit, etc., and is certainly not an ideal diet for persons with high fever. In a discussion which took place recently at the New South Wales Branch of the British Medical Association, Dr. Fiaschi, the Principal Medical Officer of the No. 2 Military District, stated that the military authorities would not presume to dictate to an experienced medical officer in charge of an expeditionary force what prophylactic measures he should adopt (see *The Medical Journal of Australia*, April 17, 1915, p. 361). This attitude should be upheld, but the military authority should adopt means to satisfy itself that the officer in charge is prepared to carry out his duties efficiently. We trust that, should it become necessary in the future for our men to be sent to a malaria-infected district, adequate precautionary means will be adopted to prevent a repetition of this widespread outbreak of the disease among the troops. In the meantime, the civil authorities have to face the problem of removing the danger to the civil population, both by keeping a strict record of every case of malaria occurring in the whole Commonwealth, and by instituting an energetic campaign against the plasmodium carrying mosquito.

We have been asked by the Royal Serbian Legation in London to insert in the *Journal* an appeal for assistance for the distressed people of Serbia and Montenegro. It is stated that a large number of soldiers have been rendered incapable of earning a living, and in very many instances the widows and children of the killed are wholly unprovided for, and are experiencing material privation. A committee for the speedy relief of the destitute has been formed, and the Archbishop of Belgrade and Metropolitan of the Kingdom of Serbia has been appointed President. The Archbishop signs the appeal. Contributions toward this fund should be sent to the Royal Serbian Legation, 195 Queen's Gate, London, S.W., and cheques made payable to the Legation.

#### LEGISLATIVE PROPOSALS IN VICTORIA.

In his speech at the opening of the Victorian Parliament on April 20, 1915, His Excellency the Governor mentioned that during the ensuing session bills to regulate the public charities of Victoria, to facilitate the sewerage of country towns and to amend the Public Health Act would be presented to the members. He also referred to proposed measures dealing with miners' phthisis, and with weights and measures, which would be laid before the two houses.

#### THE SYDNEY MEDICAL MISSION.

The fourteenth annual report of the Sydney Medical Mission, dealing with the year 1914, includes brief details of this excellent institution. The Mission aims at the pro-

vision of medical attendance and medicine for persons who cannot afford to pay for medical attendance or who cannot obtain it through the medium of a Friendly Society Lodge. The attendance is given at the patients' own homes or at the Mission. The Medical Superintendent, Dr. Ettie Lyons, assisted by some of the members of the Executive Committee, namely, Drs. W. H. Crago, G. E. Rennie and George Bell, as well as by Dr. Susie O'Reilly, Dr. Margaret Harper and Dr. Alfred Gibson, paid 3144 visits to the patients' homes, and gave treatment on 5,986 occasions at the Dispensary. In all, 3,450 patients were dealt with. The cost of the Mission for the year was approximately £592, while £642 was collected as donations, subscriptions, contributions from patients, bequest and a donation from the Hospital Saturday Fund. The Mission has thus a balance of £50 to their credit.

### University Intelligence.

#### UNIVERSITY OF ADELAIDE.

(From our Special Correspondent.)

The University of Adelaide, by the death of its Vice-Chancellor, has lost one of its most striking personalities. From its inception, Dr. Barlow played a prominent part in the development and growth of the University. He was at first Registrar; he was elected a member of the Council shortly after he resigned this office, and for the past eighteen months he has been Vice-Chancellor. A distinguished member of the legal profession, his knowledge on all points of law was of the greatest value to the Council, and as Chairman of the Finance Committee he steered the University through many financial difficulties. Personally, Dr. Barlow was not only honoured, but beloved by all who came in contact with him. The great gathering attending his funeral bore testimony to the respect in which he was held.

With a view to assisting the Army Medical Department, and also those fourth year undergraduates who were anxious to go to the front, the Senate, at a recent Convocation, passed the following resolution:—

The following Clause is hereby added to Chapter XXV.:—

4. Notwithstanding anything to the contrary contained in the Statutes or Regulations of the University, the Council shall have power, during the continuance of the present war, (1) to shorten the period of study required to obtain any degree or diploma, and (2) to alter the date prescribed for any examination.

Acting on the powers thus obtained, the Council has decided that the final examinations for fifth year students of medicine shall be held in the first week of September this year, instead of in the last week of November. The lectures and hospital work will be continued throughout the usual periods of vacation.

The entries for medical students numbered fourteen; last year there were twenty-two.

### Medico-Legal.

At the Court at Port Melbourne, Dr. C. J. Sabelberg sued William Lovelock, a local money-lender, on April 15, 1915, for six guineas, being his fees for medical services rendered between March 15 and April 19, 1909. The claim was disputed. Defendant was a lodge patient, and attended the Port Melbourne Dispensary in 1909, where Dr. Sabelberg treated him for a condition which was excluded from the diseases treated under the lodge contract. The plaintiff contended that it was agreed that the defendant should be treated as a private patient. He made a microscopical examination, and informed Lovelock of the nature of his complaint. The defendant denied that he had been informed of the nature of his illness, and also that there had been any arrangement. After further contradictory evidence, an order was made for the amount claimed, with 26s. costs. A stay of proceedings for one week was granted.



## Abstracts from Current Medical Literature.

### MEDICINE.

#### (137) Localized Subacute Bronchopneumonia.

Larrabee (*Boston Med. and Surg. Journ.*, February 18, 1915) describes the following case: A man, aged 46, previously healthy, had been ill for about ten to fifteen days before admission to hospital with a cough, at first mild, then becoming severe, abundant expectoration, at one time streaked with blood, and some fever. He had no pain in the chest. The temperature ran a low, irregular course, the total duration of the fever being about four weeks. There was no crisis. In the lower half of the right back there were numerous coarse, moist râles. At first there was no dulness, and no change in the voice or breath sounds. Later, the râles became finer, and there was more or less dulness and diminution of sounds. Consolidation was never recognizable by physical examination. The leucocytes were 24,200 on admission, later counts being 19,800, 10,000, 9,600, 11,500 and 15,200, the two latter being obtained after convalescence appeared to be well under way. In the radiogram, a slight, but definite shadow was seen in the lower outer portion of the right lung, limited to that part of the lung lying outside the dome of the diaphragm. There was also some increase in the intensity of the markings, usually considered to be due to the blood-vessels or bronchi. The sputum was examined for influenza and tubercle bacilli on several occasions, but always with negative results. The physical signs cleared up slowly, and the total duration of the illness from onset to discharge from hospital was fifty-eight days. The author takes this as a type of case. The condition may be described as a pulmonary infection, localized in the lower portion of one lung, and characterized clinically by lack of definite consolidation, mild course and long duration. He considers the cases described by Riesman (*Amer. Journ. of Med. Science*, CXLVI, 1913) as a lobar form of broncho-pneumonia of long duration, occurring in children and young adults as corresponding very closely to his own. As regards the pathology of the disease, he says it is certainly, an infection, for it is accompanied by fever and leucocytosis, and the general picture is obviously that of a bacterial disease. It is possible that some of the cases were influenzal infections, but no influenza bacilli were found. It is not bronchitis, since the presence of dulness, changes in the sounds and fremitus, and the radiographic evidence of increased density prove involvement of the lung parenchyma. Although pneumococci are always found in the sputum, yet the disease is not a lobar pneumonia, as there is never any evidence of a frank consolidation, nor does the clinical course of the disease correspond to that of this condition. The principal departure from the usual type

of lobular or catarrhal pneumonia is that it is confined to one lobe or to a portion of one lobe, and that it runs a milder and frequently more protracted course. In two cases the patient had failure of cardiac compensation, and the pulmonary condition was apparently an infection of one of the cedematous bases. The prognosis is invariably good, and no specific treatment is likely to produce any marked immediate results.

#### (138) Fibrinolysis in Chronic Hepatic Insufficiency.

Goodpasture (*Johns Hopkins Hosp. Bulletin*, November, 1914) in the course of an investigation of the blood in hæmorrhagic conditions, examined the blood drawn soon after death from the heart of a woman who had had advanced hepatic cirrhosis. The blood clotted firmly in normal time, but three and one-half hours later the clot had completely dissolved, leaving no trace of fibrin. Three other cases of atrophic hepatic cirrhosis also came to autopsy, and the blood examined in the same way showed fibrinolysis. As to the nature of this process, there can be little doubt that it is due to enzyme activity. The activity is most pronounced at body temperature; it is greatly injured by heat at 60° C., and destroyed at 65° C.; it is inhibited by normal serum. After standing two or three days, a plasma gradually loses the greater part of its activity, so that dissolution of its clot proceeds very slowly. These facts are in favour of enzyme activity, and are opposed to simple fibrin dissolution. It is uncertain whether the ferment is specific for fibrin, but certainly fibrin is attacked with much greater rapidity than egg albumin or fibrinogen. With the facts at hand so far it seems reasonable to regard fibrinolysis as the activity of normal proteolytic ferments of the blood, operating by virtue of a diminution or absence of normal anti-proteolytic substances. The patients have exhibited the usual signs of advanced hepatic cirrhosis. They have all manifested a tendency toward hæmorrhage, and their deaths have been such as might be in great part ascribed to what is recognized as hepatic insufficiency. Fibrinolysis has thus been associated with (a) chronic liver injury, severely impairing hepatic function, and (b) a hæmorrhagic tendency. A few human cases of acute liver necrosis have come under the author's observation, but none have shown active fibrinolysis in the blood. Again, livers severely injured by advanced passive congestion, but which are apparently compensating, have not been accompanied by fibrinolysis. Its presence has been associated in these cases only with a stage in chronic liver disease when there is severe functional impairment of the organ. The presence of a ferment in the blood, capable of digesting its clot completely, may be of considerable diagnostic and prognostic value in chronic hepatic insufficiency. In four cases of failure of cardiac compensation, with ascites, when there might have been a question of differ-

ential diagnosis from cirrhosis, the fibrinolytic ferment has not been active. Likewise, it has been inactive in two cases of tuberculous peritonitis, with ascites. The association of fibrinolysis, with a marked tendency to hæmorrhage is also of considerable interest. In one of the cases here recorded there is little doubt that digestion of clots *in vivo* was an important factor in the causation of the bleeding. At the autopsy there was found between the peritoneum and the abdominal wall, beneath a paracentesis puncture, a hæmatoma as large as a hen's egg, containing dark, fluid blood. A low fibrinogen content obviously also predisposes to bleeding, by the formation of inefficient clots.

#### (139) The Significance of von Pirquet's Test.

Frazer (*Medical Record*, January 9, 1915) states that von Pirquet found that the reaction occurred in but a small proportion of infants, but that with advancing years it became more and more frequent, so that at the age of ten years about 70% of the children tested gave a positive reaction. Scarcely any adults gave a negative reaction. The discrepancies in the results obtained by various observers are not easily explained, although von Pirquet admitted that his figures were probably higher than those of other cities, on account of the tests having been made on children of the poorer classes, these children being infected at an early age because of the prevalence of tuberculosis among the parents. Some discrepancies must be attributed to difference in technique and to lack of agreement as to what constitutes a reaction. As yet there has been no uniformity in the application of the test, and it is not always possible to compare the results of one observer with those of another. We are still in the dark as to the conditions responsible for varying degrees of reaction, and as to the proper interpretation of these reactions, although it is evident that there are two factors concerned in the production of sensitiveness—a sufficient call on the defensive mechanism and the power of active response. After a brief reference to the opinions of some of the later writers, the author summarizes his conclusions as follows: (1) That a positive cutaneous reaction is less frequent in children than it was once thought to be, the high percentage of reactions obtained being due to the application of the test chiefly to infected children of the poorer classes. (2) That therefore a positive reaction is of greater significance than it is commonly supposed to be. (3) That while there is an increasing percentage of reactions with years, and a corresponding decrease in the value of the reaction, the view usually held that the reaction has significance only during the first two or three years of life is not borne out by recent figures, and that a reaction occurring up to the age of ten should be regarded as suspicious. (4) That annual tests

should be instituted in the effort to detect early infection, and that, bearing in mind the fact that many, if not the majority, of cases of clinical tuberculosis in later years are due to renewed activity of old foci, endeavours should be made by proper means to prevent the development of "infection" into "disease." (5) That a negative reaction, negative on repetition of the test, is valuable evidence of the absence of tuberculosis, unless the child be suffering with advanced or acute disease, especially measles. (6) That further study of the test is necessary before the significance of the reactions can be appreciated fully, and that in the future it is possible that refinements of technique may enable us to determine with greater accuracy the recency of the infection.

#### (140) The Chemical Examination of Duodenal Contents as a Diagnostic Means in Jaundice.

Crohn (*Journ. Amer. Med. Assoc.*, February 13, 1915) has examined the contents of the duodenum in conditions of jaundice in a series of 52 cases. The patient swallows the Einhorn duodenal tube at night. This is left *in situ* until morning. Two hours after the administration of a milk test meal the contents of the duodenum are steadily aspirated for five minutes. The duodenal picture characteristic of cholecystitis and cholelithiasis is that of abundant heavy viscid, dark green bile. An excess of mucus is visible. In stone impacted in the common bile duct bile was found in the duodenum in five out of six cases examined. It has long been known to clinicians that stone impacted in the common bile duct rarely causes complete obstruction. In a case of protracted jaundice with clay-coloured stools, bile in the duodenal contents, even when diminished in quantity, is strongly in favour of calculus. In similar protracted cases of jaundice its complete absence is presumptive evidence of malignancy. In three cases of post-operative stricture of the common bile duct, bile was absent in two. In the great majority of cases of new growth involving the biliary system, there is complete absence of bile from the duodenum. In pancreatitis, bile may be found in the duodenum. In hypertrophic cirrhosis of the liver there is a superabundance of bile. Crohn points out that there is no more difficult problem to solve than the determination of the causation of a long continued jaundice. Courvoisier's law is valuable when positive. The differential diagnosis of impacted calculi, new growth of the biliary tract and chronic pancreatitis may be very difficult. In these cases examination of the duodenal contents is of the greatest value. He gives the history of a case of a woman, aged 68 years, who suffered from jaundice, loss of weight and abdominal pain. Examination of the duodenal contents revealed complete absence of bile and ferments. Blood was present in the aspirated contents, and definite diagnosis of new

growth was made. The autopsy revealed a typical advanced carcinoma of the terminal portion of the bile duct invading the pancreas.

#### NEUROLOGY.

##### (141) Encephalitis from the Inhalation of the Fumes of Gasoline.

Potts (*Journ. Nervous and Mental Disease*, January, 1915) states that the production of more or less transient symptoms such as headache, nausea, delirium, and loss of consciousness by inhalation of the fumes of gasoline and other hydrocarbons is not uncommon, but the occurrence of symptoms suggestive of organic disease of the brain resulting from the poisonous fumes of hydrocarbons is not so common, judging by the few cases of that nature recorded, and the large amount of similar mixtures now in use. The case recorded by the author was that of a man aged 45 years, who was attended to hospital in an unconscious condition, with the history that he had been engaged for some time filling the tanks of automobiles with gasoline, and that while at work he had fallen over unconscious. He remained in that state for some hours, and then passed into a stuporous condition from which, however, he could be roused. He had some ptosis of the right eyelid, and the eyeball was drawn downward and to the right. Nearly complete oculomotor palsy on the right side was present, the only movements being a slight contraction of the pupil to light and slight power of raising the eyelid. The left pupil was smaller than the right, and responded to light; all movements of the eyeball were lost, save inward rotation and slight rotation outward. Associated movements of both eyes to the right was present. There was slight weakness of the muscles of the lower part of the face on the left side, and some weakness of the left arm and leg on the same side. The tendon jerks on the left side were more active than on the right. There was asynergia of the left arm and left leg, with some loss of muscle tone. The gait was unsteady, of the cerebellar type, the tendency being to fall towards the left side. It was subsequently ascertained that he had always been a hard worker, a moderate drinker, but did not smoke, and he had had no venereal disease. The Wassermann reaction was negative. He was treated with potassium iodide and strychnine, and improvement gradually took place. In two months time there only remained some impairment of the functions of the left oculomotor nerve, ataxia of the left arm, and possibly some weakness of the left leg. These symptoms had persisted. The author considers that the symptoms were due to a toxæmia, and raised the question whether there was merely a functional disturbance or an actual organic lesion as indicated by the diagnosis of encephalitis. While most of the symptoms had disappeared, there still remained after the lapse of some months evi-

dence of permanent damage to some functions. A lesion in the region of the Aqueduct of Sylvius would explain the symptoms.

##### (142) Spinal Decompression in Meningo-mylitis.

Taylor and Stephenson (*Journ. Nervous Mental Disease*, January, 1915) presented a paper at the meeting of the American Neurological Association on spinal decompression in meningo-mylitis, and raised the question whether in selected cases decompression would not only shorten the period of invalidism, and enhance the completeness of recovery. Except in syphilitic cases the usual outlook in non-fatal cases of meningo-mylitis is for a tedious illness followed by slow cessation of active symptoms, and the persistence of a greater or less degree of invalidism according to the site and amount of permanent damage to the cord substance. In three of these cases there was a history of exposure, twice to inclement weather and once to a street car injury. In each instance the onset was in the form of severe neuralgic root pains, referred to a fairly definite cord level. After these pains had lasted for some time, with remissions and exacerbations, a more severe attack was followed by motor disturbances, loss of control of the sphincters, and other phenomena indicative of a transverse lesion of the cord. In each case the upper level of the lesion was clearly indicated. In two of the four there were trophic disturbances, one patient had a bed sore, and the other a disturbance over the outer side of the foot. The interval between the onset of definite symptoms and operative relief was 13 months in case 1, three months in case 2, seven months in case 3. Case 4 had had seven months of disabling pain, although the accident, which had occurred three years before, had been followed by more or less continuous discomfort. The authors conclude as follows:—1. Selected cases of meningo-mylitis are susceptible to surgical treatment where the findings indicate the segmental level. 2. This treatment should consist in laminectomy, free opening of the dura, and probably, incision into the posterior columns of the cord, especially in those cases showing marked infiltration and swelling of the cord. 3. The operation adds very little to the risk, but seems to diminish the period of convalescence, and to lead to better results than those following expectant treatment. 4. Decompression probably acts by causing freer circulation, with the more rapid absorption of the inflammatory exudate. Incision of the cord probably facilitates drainage. 5. The small risk inherent in laminectomy, and the great advantage likely to accrue to the patient, are in favour of surgical treatment. The same holds good for early exploratory laminectomy in spinal cases where the diagnosis is not clear, but where the symptoms point to some cord level as the seat of the trouble.

## British Medical Association News.

### SCIENTIFIC.

A meeting of the South Australian Branch was held at the Lister Hall, Adelaide, on March 25, 1915, Dr. Morris, the President, in the chair.

Dr. H. Swift read a paper on "Infant Feeding," the text of which is printed in full on page 401 of this issue.

Dr. Helen M. Mayo also read a paper on the same subject. (See page 404.)

Dr. W. T. Hayward said that they all more or less agreed with the principles enunciated in Dr. Swift's admirable paper. It was interesting to hear that in past times mothers suckled their children for such a long period. Though he would not advocate that the custom should be reverted to in its entirety, he could not see why, if the mother and child were both in good health at the end of nine months, weaning should be insisted on, nor why, under such circumstances the child should not have the advantage of its mother's milk for another three months or so. It was an unfortunate fact that at the present day many young mothers, anxious to nurse their infants, were unable to do so, or could only do so for a short period; it would be a great thing if the cause of this decadence of a natural function could be discovered. There could be no doubt but that the abnormal mortality during infancy was due to artificial feeding, and it was a very difficult question to decide how hand-fed infants should be fed. It frequently occurred that babies treated according to the best rules for infant feeding failed to thrive, and yet did well subsequently on most unorthodox starchy food, or on condensed milk. Formerly, he held the opinion that one of the chief reasons why children did not do well on cow's milk was because it was not sufficiently diluted, but a visit with Dr. Mills to the Ashfield Home, near Sydney, failed to confirm that view, for the children there, fed on pure milk, looked wonderfully well, and the mortality was a negligible quantity. He had come to the conclusion that no hard and fast rule could be laid down. General principles should guide treatment, but great latitude allowed.

Dr. Frank S. Hone said that as Dr. Swift had sketched in a very able manner the broad principles of infant feeding, he proposed dealing with one or two special features in which there had been an advance during recent years. Before doing so, he wished to touch upon two matters raised by Dr. Swift. The first was in regard to breast feeding. A healthy change had occurred within the last 20 years. While formerly mothers were anxious to avoid nursing their infants, the majority of them were anxious now to carry out this function. Many women, however, could not continue nursing for any length of time. He had been struck by the fact that mothers who had sufficient milk for their infants while they were in bed, frequently failed to produce enough when up and about. Fatigue was a usual cause of lessened milk supply. Another cause was the lack of sufficient fluid in the dietary. He had been told by women, who had nursed their babies many years ago, that they had taken what would be regarded to-day as immense quantities of liquid. It did not matter what the liquid was. While lying-in, the woman was under the best conditions both in regard to the absence of fatigue and abundance of liquid nourishment. After the nurse left she was in the reverse condition, with the result that the milk supply lessened. Since he had impressed these facts as a routine measure on mothers, he had been struck with the improvement, especially in those women who had previously been unable to continue the nursing of their babies. The second point had reference to cow's milk in the dietary of infants. Everyone would agree with Dr. Swift in his insistence on the first place being given to cow's milk among the substitutes for mother's milk. It was, however, necessary to provide an adequate supply. The question of quantity had been overlooked in the anxiety to lay stress on purity and proper dilution. This was especially important in the case of older infants. When he gave evidence on behalf of the Branch before the Royal Commission a year or two ago, he investigated the subject, and found that in an unselected series of working men's homes, the average quantity of cow's milk purchased daily was from one to one and a half pints,

with two tins of condensed milk a week. From these figures, he estimated that  $1\frac{1}{2}$  pints of fresh milk and  $\frac{1}{2}$  pint made from condensed milk was a full allowance for the total supply for the family. It could be accepted that milk should be the sole food of an infant up to 9 months of age, and its main food up to 2 years of age. From  $1\frac{1}{2}$  to 2 pints a day was the amount prescribed for each child up to 2 years of age. It was thus evident that if the family supply did not reach two pints it was woefully insufficient. Condensed milk was used in much greater dilution than that directed, and Dr. Hone was convinced that the low resisting power to disease of many older city children was due to the small quantity of milk they took, as compared with country children.

One of the great advances made in infant feeding during recent years was the recognition of treating each infant as an individual. Medical men were formerly so much interested in the feeding side of the question that they were in danger of overlooking the fact that there was an infant to feed. The human stomach was not a test tube, and this was especially true of an infant's stomach. The spectacle of a number of men was often seen, each with his own selected scientific mixture, or his favourite food, or his brand of condensed milk, which he proceeded to pour into any infant that might require artificial feeding. It was just as easy to tell what an infant was being fed on, if the name of the physician to whom the infant had been taken was known, as it was to name the operation to which an adult had been subjected, when the name of the specialist consulted was mentioned. The rule of thumb was particularly dangerous in infant feeding.

In dealing with difficult cases, he found it useful to classify dyspepsia, *ex alimentione*, *ex infectione* or *ex constitutione*, and to maintain this order in dealing with the condition. Emphasis should be laid first on the nutriment supplied, next attention should be directed to the question of infection, and lastly, the importance of the individual constitution had to be recognized. Every practitioner had experienced the scorn of a mother, who, on being severely reprimanded for the improper food used, retorted that her three perfectly healthy children had been brought up on the same food. They all recognized the individual factor in cases of gross anatomical lesions, like congenital hypertrophic stenosis of the pylorus, and admitted that latent congenital syphilis in an infant might prevent assimilation of food. One infant might be unable to digest curd or fat, and this functional characteristic might be just as potent a foe to nutrition as a gross anatomical abnormality or pathological lesion. Curd indigestion was probably a more common source of trouble than had been supposed. He suggested that the virtue of sodium citrate depended on its assistance in this respect. The success of condensed milk in many cases was due to the dilution of casein. He raised the question whether the good result following the substitution of condensed milk for fresh cow's milk during a hot summer was not due just as much to the lessening of the quantity of fats, as to the greater freedom of bacterial contamination. Adults were little tolerant to fat during hot weather, and he thought that infants might show the same tendency. The recognition of these individual idiosyncrasies in practice, and the consequent study of each infant was invariably followed by better results than was the following of routine rules for feeding.

The other great advance was the recognition of the importance to detail, not only in regard to the protection of food from contamination, but also in regard to other factors in infant feeding. Dr. Hone illustrated this point by referring to the difference made by the alteration of such details as the size of the opening in a teat, the substitution of plain water for barley water as a diluent, the regulation of the amount of food given at a meal, and so on. In many cases in which an infant was thriving on its mother's milk, and yet was having wakeful nights, the addition of one feed of diluted cow's milk just before bed-time ensured a peaceful night. In other cases, in which constipation was present, and some curd in the motions, while the infant was fed exclusively on the breast, one feed of Horlick's malted milk a day relieved the constipation. If by attention to small details the infant could be kept at the breast, it was far better for the child and the mother than by adopting a



wholly artificial diet. To carry this out successfully, it was essential that attention should be paid to each individual case. Even intelligent mothers were in the habit of guessing at quantities instead of measuring them accurately. Accurate measurement, however, was extremely important.

Dr. Hone insisted on the advisability of returning from an artificial food to cow's milk very gradually in those cases in which the food had to be resorted to temporarily. He also pointed out that tram and train journeys frequently upset the digestion of an infant. The sudden and abrupt stops followed by a rapid movement through the air were just as bad for the infant as rocking it to sleep.

Dr. Willcox agreed that mother's milk was the best food for infants, and that cow's milk was the best substitute. The preparation and presentation to the child were important. In regard to the quantity, he was of opinion that it was necessary to have regard to the body-weight of the infant. He allowed 1/7 to 1/10 of that weight in milk. If there was a gain in weight the feeding might be regarded as satisfactory, but inasmuch as the weight in artificially-fed infants increased unevenly, these infants should not be weighed more frequently than once each week. The amount required was readily found by allowing 50 calories per lb. body weight as a reasonable diet. One ounce of milk might be taken as equivalent to 20 calories. He began with 1oz. every two hours for the first week, and increased this amount gradually by 1oz. for each month of age during the first year, in order to keep up with the growth in capacity of the stomach. No infant should be given more than 35 to 40 ounces of pure milk in 24 hours. In regard to dilution, he advised half milk and half water to begin with. He was of opinion that if the child could not digest this dilution milk was unsuitable. At the sixth week he gave two parts of milk to one of water, and at three months he gave three parts of milk to one of water. At the fourth month he gave pure milk. Budin's method of giving pure milk had been mentioned by Dr. Swift. The explanation of a vomiting baby stopping vomiting when taken off diluted milk and put on pure milk was that the HCl content of the infant's stomach was less proportionately to the casein in the pure than in the diluted milk, and consequently the curd was less hard and firm. Budin's feeds were smaller than usual; the infant did not get abnormally fat, and was not subject to rickets.

The speaker agreed with Dr. Hone in regard to the importance of attention to small details. He was of opinion that vomiting after a feeding was often due to the food having been too much, or having been given too quickly, often through a large teat, which admitted air as well as milk. In regard to sterilization of milk, he referred to the methods in use in England and America of rapid cooling below 50° F. The milk was kept at low temperatures, and it was an important point to pass it rapidly through the temperatures of 65° and 140°, as these were the most dangerous. Referring to bacterial contamination, he was surprised that Dr. Swift had passed over the danger of tuberculous milk so lightly. Dr. Harold Stiles, whom he considered to be one of the first authorities on surgical tuberculosis in children, had insisted on the doctrine that tuberculosis of glands and bone in the early years of life was directly traceable to tainted milk. The researches of Fraser and Mitchell, of Edinburgh, working under Stiles, had confirmed this view. In view of Fraser's convincing and classic work, "Bone and Joint Tuberculosis," it would seem advisable to emphasize the danger of tuberculous milk.

Turning to the explanation why condensed milk at times suited the infant better than fresh milk, he stated that it appeared to him that the heat to which it had been subjected lessened the tendency to coagulation, and hence to the formation of hard and irritating curds in the baby's stomach. Further, condensed milk was free from bacterial contamination. In regard to meat juice, recommended by Dr. Swift as an adjuvant, he had formed the opinion that it did not possess any advantages over albumin water, that it was much more expensive, and only contained 5% to 6% of albumin. He called attention to the value of inspection and examination of the faeces, including the reaction to

litmus, in giving information as to the ingredient in the food responsible for gastro-intestinal disturbances. A normal motion of a breast-fed infant after the first 72 hours of life was bright yellow and faintly acid. The motion of an artificially fed infant was alkaline, and varied in colour from white to brown, according to the nature of the food. Large pale, fatty stools always of an acid reaction, indicated over-feeding; and brown, frothy, offensive stools were due to excess of carbohydrates. The recognition of this was very valuable in adjusting the percentage composition of the diet. Milk laboratories, as established in America, were required for the proper percentage modification of milk. He had found that buttermilk sterilized with the addition of 1/2 oz. of flour, and 1 to 1 1/2 oz. of cane sugar to the pint was well tolerated in cases of chronic diarrhoea in children previously fed on cow's milk.

Dr. Duguid expressed the opinion that infant-feeding was an art in which we should be guided by science rather than governed by it. Experience meant more almost than anything else, and realizing that he had listened with interest and enjoyed Dr. Swift's paper to the full. Reverting to Dr. Hone's observation that when the mother got up after confinement the milk showed a tendency to diminish, he recalled three cases recently observed in which that happened. His experience was that the important thing was to quicken the mother's appetite so that she could take a full course of general fare.

With regard to the feeding of infants proper he thought it well always to keep in mind the requirements of the infant. Infancy was the period of greatest growth, so that the building materials—proteins and mineral matter—were of the greatest importance. The surface of the body, too, was great in proportion to the bulk, and consequently relatively more fat than in the adult was essential to maintain the body-heat. On the other hand, very little energy was expended, and the child therefore required very little carbohydrate. The baby that was alive with activity required more than the placid child.

There was one matter he would be glad to have elucidated. One reason why cow's milk was more indigestible than mother's milk was because the former contained, as Dr. Swift mentioned, a considerable excess of calcium, particularly inorganic calcium. And yet at times when cow's milk was not agreeing, lime water—Ca(OH)—was added to make it more easy of digestion.

In humanizing cow's milk it was not merely a question of dilution. Not only were the relative proportions of casein and albumin in the two milks different, but their quality or nature was different. It was chemically impossible to humanize cow's milk.

He agreed with Dr. Swift that the dried milks lacked in that the active enzymes of fresh milk were absent.

Condensed milks, he was glad Dr. Swift did not care for. The only one at all suitable to the requirements of the infant was unsweetened whole milk, and it soon went rancid when exposed to the air. Smaller tins, such as would contain only a day's supply, would be an advantage. Condensed milk was only for tiding over an emergency. If long continued, the child was liable to contract a carbohydrate indigestion even in late childhood.

There were two criteria as to proper feeding—weighing and the examination of faeces—the latter of which was perhaps neglected.

In infants with weak digestion, and in infants with gastro-enteritis, Dr. Duguid had found albumin water of great service, used alone at first, and later coupled with such additions as rice-water, whey and milk. Previously he had used albulactin largely, but lately he had found that egg-albumin seemed to answer equally well.

Dr. Lendon said that he thought that at their previous meeting in February they had been so taken up with the subject under debate that they had omitted, as a Branch, to welcome Dr. W. T. Hayward back. He felt that their colleague ought not to be allowed to return to their midst without some expression of their gratification at the honours which had been bestowed upon him in the old country. Although Dr. Hayward deprecated the suggestion of any personal element in the conferring of these distinctions, which were intended as a compliment to Australia, Dr.

London felt sure that the British Medical Association would not have made him a Vice-President, nor the University of Aberdeen a Doctor of Laws, without having "sampled" him first. Dr. Lendon asked the members present to join him in congratulating Dr. Hayward very heartily.

Dr. W. T. Hayward thanked Dr. Lendon for his kind, complimentary remarks, and also the members for the cordial manner in which they received them. He fully recognized that the honours conferred upon him were primarily intended as a compliment to the medical profession in Australia, but he felt proud and happy that he had the good fortune to be the recipient.

#### MEDICO-POLITICAL.

A meeting of the Council of the Victorian Branch was held in the Medical Society Hall, East Melbourne, on April 15, 1915, Dr. Honman (the President) in the chair.

Dr. R. L. McAdam was welcomed by the Chairman as a new member of the Council.

The sub-committee appointed to wait upon the Insurance Commissioners in connexion with the proposal to increase the fees payable to certifying medical practitioners under the Workers' Compensation Act, represented a report. The Commissioners favoured the increase in fees and mileage in all cases save those for examination of the aged and infirm. It was pointed out to the sub-committee that the increase in the fees would be subject to the approval of the Governor-in-Council. The members would be notified when this had been obtained.

A letter of sympathy was sent to the widow of the late Dr. R. W. Hughston, of Harrow.

Dr. J. Ramsay Webb tendered his resignation as Vice-President and as member of the Council, in view of the fact that he had volunteered for service with the Expeditionary Forces. The resignation was not accepted, but Dr. Ramsay Webb was granted leave of absence for the period of his service with the Forces.

A quarterly meeting of the Geelong Division of the Victorian Branch was held on March 30, 1915, Dr. Gavin McCallum (the President) in the chair.

Dr. F. Moreton moved:—

"That in view of the evidence emphasizing the dangers to our troops from excessive alcoholism, so constantly coming before us, and hoping to exert influence towards temperance among them, members of this Division of the British Medical Association are of opinion that, in the present national emergency, medical men will do well to become and remain total abstainers during the continuance of the war."

He said that the felt in the present emergency this would have great effect. The public looked to the medical profession for guidance in matters of food and drink. The South Australian Branch had passed the motion, eminent men in England had spoken on the alcohol question, Russia and France had taken very strong measures, and the initiative should be taken in Australia. They should recognize that it would influence the troops, and those interested in the troops. All the trouble with the troops was due to alcohol, and the matter did not end there; other troubles followed the taking of drink.

Dr. H. F. Elvins seconded the motion. He said that, from the action of France and Russia, they could see that the older European nations were alive to the injurious effects of alcohol on troops. There was no need to elaborate on the effects of strong drink. It might be said that the motion could do no good, but his opinion was that if all the medical men of Australia would take the matter up, it would have a very far-reaching effect.

Dr. Newman said that, in his opinion, not only medical men but all men in responsible positions should carry the proposal into effect.

The motion was carried.

It was moved by Dr. Morgan, seconded by Dr. Croker, and resolved:—

"That the Branch be informed of the action of the Division, and the motion published in local papers."

Dr. McCallum read the notes of the following cases:—

- (i.) Tumour of the side of the head of four years' duration. The tumour was half the size of the head itself. It had been removed surgically, and proved to be a *sarcoma*. It had disappeared completely after treatment with Röntgen rays.
- (ii.) An *extra-dural abscess* in a child aged 3 months.
- (iii.) A *congenital cystic hygroma* of large size.

At a meeting of the Council of the South Australian Branch, held on April 23, 1915, the resignation of the President (Dr. E. W. Morris) was considered. Dr. Morris is leaving Australia with the Australian Naval Bridge-Building Expedition to Europe, and he tendered his resignation, realizing that he would not be able to complete his term of office. The Council, however, have determined otherwise. They have requested Dr. Morris to withdraw his resignation, in view of the fact that his presidency expires in June. A vote of thanks to Dr. Morris for his services to the Branch was passed, and the members conveyed to him their good wishes.

Under ordinary circumstances, the Vice-President replaces the President in his absence. Dr. J. Corbin, the Vice-President, however, is serving with the forces. In the unusual conditions, Dr. B. Poulton, the ex-President, was appointed Acting-President until the annual meeting, which will be held in June.

The following have been elected members of the South Australian Branch:—

Dr. Mildred May George, Adelaide Hospital.  
Dr. John Forrest Gardner, Broken Hill and District Hospital.

Dr. Kirke Charles Godfrey, Glenelg.

Dr. Walter Leonard Smith, Adelaide Hospital.

Dr. Kenneth Nugent Steele, Adelaide Hospital.

Dr. Charles Trevor Turner, Adelaide Hospital.

Dr. Reginald Arthur Haste, Adelaide Hospital.

Dr. Frederick Samuel Thomas, of Denham Street, Townsville, has been elected a member of the Queensland Branch.

Before leaving Sydney for England, Dr. J. Ashburton Thompson offered to the Council of the New South Wales Branch the following publications, which were gratefully accepted, and have been placed in the Library of the Branch:—

*Journal of Tropical Medicine*: 14 vols. 1889-1912.

*Annales de l'Institut Pasteur*: 26 vols. 1887-1912.

*Bulletin de l'Institut Pasteur*: 6 vols. 1903-1908.

*Journal of Hygiene*: 12 vols. 1901-1913.

At a meeting of the Queensland Branch, held on March 19, 1915, it was decided to ask each member for a regular monthly subscription toward the Patriotic Fund, in aid of the Belgians. An appeal had been received by the Branch, and the Patriotic Committee asked for a monthly contribution in the Commonwealth of £76,000. The President, Dr. A. B. Brockway, has now issued a circular appeal to the members. The money will be received by the Branch and forwarded to the Belgian Consul in Brisbane month by month. The first list of subscriptions is as follows:—

Dr. Avery, Roma, £2 2s. (donation).

Dr. A. B. Brockway, £4 monthly for 5 months.

Dr. J. A. Cameron, Ipswich, £2 0s. 6d. (April contribution).

Dr. Crawford, Miles, £1 1s. 6d. (April contribution).

Dr. Dolman, Gatten, £6 6s. 6d. monthly for 6 months.

Dr. Hammand, Clifton, £1 1s. (April contribution).

Dr. Hankins, Warwick, £1 (April contribution).

Dr. McKillop, Blackall, £1 1s. (April contribution).

Dr. Morgan, Brisbane, £1 1s. (April contribution).

Dr. O'Brien, Rockhampton, £1 (April contribution).

Dr. Patterson, Ipswich, £1 0s. 6d. (April contribution).

Dr. Sampson, Maleny, 4s. 3d. (April contribution).

Dr. Kerr Scott, £1 1s. (April contribution).

Dr. South, Boonah, £3 1s. (April, May and June contribution).

Dr. Thelander, Brisbane, £1 (April contribution).

Dr. Tilley, Warwick, £1 1s. 6d. (April contribution).

## BELGIAN DOCTORS' RELIEF FUND.

## New South Wales.

The amount received by the New South Wales Branch, in aid of the Belgian Doctors in distress, during the week ending April 27, 1915, is disappointingly small, only 29 subscriptions, amounting to £63 3s., having been sent. The Council is hopeful that a handsome sum will be placed in their hands for transmission to London, and members of the Branch are therefore reminded that every contribution is needed, and will tend to lessen the distress felt by our colleagues in Belgium. The following is the third list:—

	£	s.	d.
Amount previously acknowledged .. .. .	351	1	0
Dr. Barton, J. A'B. D., Narrabri .. .. .	1	1	0
„ Brearley, E. A., Sydney .. .. .	1	1	0
„ Brown, W. Sigismund, Parramatta .. .. .	2	2	0
„ Buckley, E. W., Tamworth .. .. .	1	1	0
„ Burt, D. J. S., North Sydney .. .. .	1	1	0
„ Cleland, J. B., Sydney .. .. .	1	1	0
„ Crago, W. H., Sydney .. .. .	3	3	0
„ Douglas, T. S., Tamworth .. .. .	1	1	0
„ Failes, F. G., Coonabarabran .. .. .	2	2	0
„ Foulds, Basil S., Sydney .. .. .	1	1	0
„ Fox, H. E., Kiama .. .. .	1	1	0
„ Fraser, Donald, Sydney .. .. .	1	1	0
„ Gillies, Sinclair, Sydney .. .. .	10	0	0
„ Hughes, James C., Sydney .. .. .	1	1	0
„ Jones, P. S., Glebe .. .. .	1	1	0
„ Kelly, J. J., Sydney .. .. .	1	1	0
„ King, A. A., West Maitland .. .. .	1	1	0
„ Ludowici, E., Sydney .. .. .	1	1	0
„ Maher, C. H., Sydney .. .. .	1	1	0
„ McClelland, W. C., Newtown .. .. .	1	1	0
„ Millard, R. J., Coast Hospital .. .. .	1	1	0
„ O'Hara, A. A., Darlinghurst .. .. .	2	2	0
„ Park, Joseph, Corral .. .. .	5	5	0
„ Parry, L. D., Pictou .. .. .	1	1	0
„ Teece, Lennox, Royal Prince Alfred Hospital, Sydney .. .. .	8	0	0
„ Tidswell, Frank, Sydney .. .. .	1	1	0
„ Watson, F. R., Katoomba .. .. .	2	2	0
„ Woolf, S., Sydney .. .. .	1	1	0
„ Anonymous .. .. .	5	5	0
Total .. .. .	£414	4	0

## Medical Societies.

(Affiliated with the British Medical Association.)

## NORTHERN DISTRICT MEDICAL ASSOCIATION.

A meeting of the Northern District Medical Association was held at Tattersall's Hall, Glen Innes, on April 14, 1915, Dr. Wrigley, the President, in the chair.

A letter from Dr. Muscio, of Emmaville, was read, dealing with the question of charging fees for the treatment of school children who were referred to public hospitals on account of hypertrophied tonsils and adenoid vegetations.

The question of the treatment carried out by the medical officers of the Education Department was discussed, and it was moved by Dr. Stuckey, seconded by Dr. Corfe, and resolved,—

“That the Northern District Medical Association protest to the Council against the doctors of the Education Department carrying out any treatment whatever in districts already well served by local doctors.”

Dr. Corfe moved, Dr. Ritchie seconded, and it was resolved,—

“That the sympathy of the members be conveyed to Dr. Murray, of Armidale, on the death of his son.”

A discussion took place on the relation of the Bush Nurses to medical practice.

A further discussion took place on the question of the payment of medical practitioners for public vaccination carried out for the Government during the recent smallpox epidemic.

It was moved by Dr. Muscio, seconded by Dr. Stuckey, and resolved,—

“That this meeting of the Northern District Medical Association protest to the Council regarding the inadequacy of the fee promised to be paid by the Government for examination of military recruits, and desire to point out that while the police constable receives ten shillings for each recruit passed, the doctor is promised only two shillings and sixpence.”

Dr. H. R. Harris, of Deepwater, was nominated for membership by Dr. Muscio and Dr. Wrigley, and elected a member of the Association.

Dr. E. H. Binney, of Sydney, read a paper on “Surgical Emergencies of Infancy and Childhood.” A discussion followed.

Dr. W. Ritchie read the notes of a case of cystitis with calculi.

Dr. T. S. Douglas read a paper on his experience of Phylacogen therapy.

## Public Health.

## THE HEALTH OF VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, for the week ending April 15, 1915:—

	Metro-		Rest of State.		Totals.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Diphtheria .. ..	65	5	49	0	114	5
Scarlatina .. ..	9	0	15	0	24	0
Enteric Fever .. ..	10	1	18	3	28	4
Pulmonary Tuberculosis .. ..	12	8	12	1	24	9

## THE HEALTH OF QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, for the week ending April 17, 1915:—

Disease.	No. of Cases.
Pulmonary Tuberculosis .. .. .	8
Scarlatina .. .. .	13
Varicella .. .. .	4
Enteric Fever .. .. .	46
Diphtheria .. .. .	50
Infantile Paralysis .. .. .	1
Erysipelas .. .. .	2
Puerperal Fever .. .. .	1
Total .. .. .	125

## SMALL-POX IN NEW SOUTH WALES.

During the fortnight ending April 27, 1915, only one case of variola has been notified to the Department of Public Health of New South Wales. The case occurred in the Newcastle district.

## HEALTH OF THE METROPOLIS OF SYDNEY.

The mortality return for March, 1915, as supplied by the Government Statistician, shows that 586 deaths occurred in the Metropolis, including 34 deaths of individuals previously resident outside the Metropolis, and deaths classified as taking place in the Islands and shipping in the Harbour.

Thus calculating on an estimated population of 752,500, the annual death-rate for the month works out at 9.34 per 1,000 of the population.

Deducting the deaths of persons non-resident of the Metropolis, in the Mental Hospitals of Leichhardt and Hunter's Hill (Callan Park and Gladesville), and adding the deaths of persons, residents of the Metropolis, occurring at the Benevolent Asylum, Mental Hospitals, and Consumptive Sanatoria situated outside the Metropolis, the number of deaths was 565, giving a corrected death-rate of 9 per 1,000.

Among children under one year of age 114 deaths were recorded for the Metropolis.

There were 1,965 births during the month, giving the satisfactory rate of 31.33 per 1,000 of the population, being 11% above the average of the previous five years.



The infantile mortality rate was 59 per 1,000 births. The fall in the rate is very pleasing, being 26% below the average for March of the previous five years.

Infective diseases were responsible for 26 deaths, of which 12 were due to diphtheria, 10 to enteric fever, and 4 to puerperal fever. Diarrhoeal diseases were credited with 54 deaths, 32 of which occurred in infants under one year of age.

Phthisis caused 32 deaths, pneumonia 36, cancer 47, diseases of the heart, and blood vessels 64, Birght's disease 20, prematurity 31, senility 28, and accident or negligence 25.

Compared with the average in March during the previous five years there were increases in the number of deaths from pulmonary diseases and senility, with decreases in diarrhoea and enteritis, phthisis, cancer and epidemic diseases, 323 cases of scarlet fever, 222 of diphtheria, 64 of enteric fever, 3 of acute malarial fever, and 2 of anterior poliomyelitis were notified during the month of March.

Fifteen cases of phthisis (pulmonary and laryngeal tuberculosis) were notified under the City Council's by-laws, and 13 premises were disinfected by the Council's trained staff after the death or removal of the patients.

(Signed) F. M. SUCKLING,

Acting Medical Officer of Health.

#### THE HEALTH OF BROKEN HILL.

The Medical Officer of Health of Broken Hill has issued his quarterly report for the period ending March 31, 1915.

The number of births in the Municipality of Broken Hill registered during the quarter was 271, being 144 males and 127 females. In the years 1912, 1913, and 1914 the numbers were 324, 248 and 262 respectively.

The number of deaths occurring in the municipality during the quarter was 105 (61 female and 44 males). The numbers in the three preceding years were 89, 85 and 110. The death-rate for the quarter was equivalent to an annual death-rate of 13.12 per 1,000 of population. The infantile mortality for the quarter was 27, as compared with 24 in 1911, 25 in 1912, 37 in 1913, and 39 in 1914. The figure given is equivalent to an infantile death-rate of 99.63 per 1,000 births.

The chief causes of death among the infants were gastro-intestinal diseases (14) and prematurity (6).

In regard to infective diseases, the following cases were notified during the quarter:—

Disease.	1st Qtr. 1915.	1st Qtr. 1914.	1st Qtr. 1913.	1st Qtr. 1912.	1st Qtr. 1911.
Enteric fever	50	92	57	39	81
Diphtheria ..	123	91	60	17	70
Scarlatina ..	15	6	2	1	0

There were 4 deaths from enteric fever, and 6 from diphtheria. No deaths from scarlatina were recorded.

Pneumonia caused 5 deaths, gastro-enteritis 3 in addition to the infantile cases, pulmonary tuberculosis 4 deaths, cardiac diseases 4 deaths, cancer 2 deaths, nephritis 3, and accidents 7 deaths.

The Medical Officer concludes his report with a direct complaint of the manner in which promised reforms are being carried out. He states that about one quarter of the Sanitary Service is still carried on under the old, unwholesome night system. He considers that the rate at which this system is being transformed into the sealed pan system is highly unsatisfactory.

### Vital Statistics.

#### THE VITAL STATISTICS OF SYDNEY AND NEWCASTLE.

The population of Sydney on December 31, 1914, was estimated at 110,700. During the month of March, 1915, 1,965 births were registered in the metropolitan area. This is equivalent to an annual birth-rate of 31.33, which is considerably higher than the average for the five preceding months of March, of 28.25. On the other hand, the illegitimate birth-rate was equivalent to an annual rate of 1.85 per 1,000 of population, as compared with 2.22 for the average of the preceding five years. The actual numbers were 116 for March, 1915, and 139 as the average for March in the period 1910-1914.

The death-rate was also satisfactory. During the month 586 deaths were registered, which is equivalent to an annual rate of 9.34 per 1,000 of population, while the average for March of the previous five years was 139, which is equivalent to an annual rate of 10.15. The number of infants under one year of age that died was 116, as compared with 142, and the infantile death-rate, calculated per 1,000 of births, was 59, as compared with 80. The Government Statistician calls attention to the fact that among the persons who died during the month two were 90 years of age, one was 95 and one was 100.

It appears that 319 births, 70 illegitimate births, and 256 deaths occurred in hospitals and other institutions. During the past 12 months the infantile mortality has varied month by month from 51 (September) to 87 (December), while the general death-rate has varied between 0.70 (February) and 1.01 (September).

In the analysis of the causes of death, a selected number of diseases and conditions are set out in tabular form, for the purpose of comparison between the actual numbers of deaths in the month of March from 1906 to 1915. Pertussis has varied, but no deaths were recorded in March, 1915. The maximum number was recorded in March, 1907 (12). The deaths from pulmonary tuberculosis numbered 22, while in March, 1913, there were 36, and in March, 1907 and 1910, there were 37. Cancer appears to have been average; the lowest number was 39, the highest 78 (1913), and the number for March, 1915, was 52. The figures given under the rubric diseases of the heart are quite unreliable. Deaths from pneumonia were considerably more common than in the corresponding month of the preceding 10 years; diarrhoea and enteritis terminated fatally in an average number; and Bright's disease caused less deaths than the average.

The causes of death are given both for the month of March and for the first quarter of the year. The latter contains more useful information than the former, and is dealt with below.

In regard to deaths due to diseases of the cardio-vascular system, including cerebral hæmorrhage, it is stated that 236 came under this heading. Of this number 137 were caused by organic cardiac lesions, including acute endocarditis. In addition to these numbers, a considerable proportion of the 91 cases of fatal Bright's disease must have been dependent directly or indirectly on some vascular changes, and the same applied to some of the 24 cases of cirrhosis of the liver.

Infective diseases are grouped in a highly inconvenient manner under the heading epidemic diseases, other general diseases, and also among the so-called local diseases. Diarrhoea and enteritis head the list with 149 deaths. Tuberculosis comes next with 99 deaths; broncho-pneumonia and croupous pneumonia comes next with 95 deaths; enteric fever is fourth with 27; bronchitis is fifth, with 25 deaths; diphtheria follows with 23; appendicitis appears 19 times; rheumatism and gout (these two absolutely different diseases are grouped together for some unexplained reason) 13 times; septicæmia 5 times, pertussis 4 times, syphilis 4 times, influenza 4 times, scarlatina 3 times, and cerebro-spinal meningitis, morbilli, and dysentery once each. There were 18 deaths entered as having been connected with the puerperal condition. During the month of March 4 deaths were due to puerperal septicæmia.

It appears that 174 deaths were caused by cancer during the quarter. Alcoholism is said to have led to death on 7 occasions.

The returns for the Newcastle district are given in less detail, but on the same plan. There were 199 births registered during March, 1915, which is equivalent to an annual birth-rate of 40.68 per 1,000 of population. Of the 199 infants 8 were illegitimate. The infantile death-rate, affecting 11 children under 1 year of age, was 55 per 1,000 births.

The number of deaths registered in the month was 48, which is equivalent to an annual death-rate of 9.84 per 1,000 of population.

During the month, 15 cases of enteric fever, 23 of diphtheria, and 47 of scarlet fever were reported to the Board of Health. None of these cases ended fatally. On the other hand, there were 2 deaths from tuberculosis, both of the lungs, 5 of enteritis and diarrhoea, and one of cerebro-spinal meningitis.

Diseases of the cardio-vascular system killed 9 persons. In addition there are recorded 2 deaths from Bright's disease. Puerperal septicæmia killed one woman, while two others died in the puerperal period.

A summary for the quarter reveals 26 deaths from diseases of the cardio-vascular system, 17 from diarrhœa and enteritis, 6 from tuberculosis, 4 from enteric fever, 3 from rheumatism, 2 each from acute bronchitis, appendicitis, and cerebro-spinal meningitis, and one each from diphtheria, chronic bronchitis, and septicæmia. One woman died of the effects of an illegal operation, four others of puerperal septicæmia, one from puerperal hæmorrhage, and one from what appears to have been eclampsia.

## Naval and Military News.

The following is a complete list of medical practitioners who responded to the call for one hundred officers for the Royal Army Medical Corps, and left Australia to take up service as lieutenants. Attached is also a list of the fifty Nurses and one Sister who have been accepted for service.

The figures in brackets indicate the Military District from which each individual was recruited. No. 1 corresponds to Queensland, No. 2 to New South Wales, No. 3 to Victoria, No. 4 to South Australia, No. 5 to Western Australia, and No. 6 to Tasmania.

Dr. G. N. Lorimer (3)	Dr. A. H. Melville (3)
Dr. C. McShane (3)	Dr. H. W. Ward (3)
Dr. T. E. Ashley (2)	Dr. B. M. Carruthers (2)
Dr. L. J. J. Nye (2)	Dr. B. W. Cohen (3)
Dr. W. A. Edwards (2)	Dr. F. H. Moran (3)
Dr. O. Barton (2)	Dr. R. O. Bridgman (1)
Dr. G. D. K. Waldron (2)	Dr. N. C. Talbot (2)
Dr. A. T. Roberts (2)	Dr. G. Renwick (2)
Dr. J. W. Farrar (2)	Dr. J. Fahey (2)
Dr. D. F. Finlay (2)	Dr. H. A. C. Wall (2)
Dr. M. E. Robertson (2)	Dr. R. W. Richards (2)
Dr. R. M. Clarke (3)	Dr. J. R. MacCulloch (2)
Dr. H. N. M. Puckle (3)	Dr. C. R. R. Huxtable (2)
Dr. J. I. M. Jamieson (2)	Dr. C. G. Adams (2)
Dr. W. E. Giblin (2)	Dr. W. F. S. Yeates (2)
Dr. G. A. Birnie (3)	Dr. W. S. Hawthorne (2)
Dr. L. B. Daly (3)	Dr. A. W. G. Murray (2)
Dr. F. E. Keane (3)	Dr. C. H. Armitage (2)
Dr. C. Stephen (3)	Dr. C. A. Verge (2)
Dr. H. C. Colville (3)	Dr. C. H. Martin (3)
Dr. A. Pryde (3)	Dr. A. J. Trinca (3)
Dr. A. C. A. Jekyll (2)	Dr. T. E. George (3)
Dr. C. K. Cohen (2)	Dr. J. Morlet (1)
Dr. C. F. Drew (4)	Dr. A. W. Bretherton (3)
Dr. E. P. Dark (2)	Dr. A. Weigall (3)
Dr. K. G. Colquhoun (3)	Dr. F. W. A. Ponsford (2)
Dr. Lucas (5)	Dr. R. W. Ryan (3)
Dr. Godby (5)	Dr. G. S. Scantlebury (3)
Dr. Rogerson (5)	Dr. R. K. Birnie (3)
Dr. Pigott (5)	Dr. W. A. L. H. Henderson (3)
Dr. N. W. Broughton (2)	Dr. J. G. Sleeman (3)
Dr. C. M. Harris (2)	Dr. W. Rogerson (3)
Dr. C. O. Donovan (2)	Dr. G. C. Bury (3)
Dr. S. W. G. Ratcliff (2)	Dr. W. A. H. Birrell (3)
Dr. A. W. Raymond (2)	Dr. W. S. Newton (3)
Dr. J. L. Digby (2)	Dr. H. R. Dew (3)
Dr. E. P. Blashki (2)	Dr. W. A. Bowman (3)
Dr. N. McA. Gregg (2)	Dr. W. C. Marsden (3)
Dr. N. E. Packer (2)	Dr. N. L. Pritchard (3)
Dr. E. T. Pinhey (2)	Dr. C. Checchi (3)
Dr. R. B. Carter (2)	Dr. R. V. Minnett (2)
Dr. J. B. Dawson (4)	Dr. C. G. McAdam (2)
Dr. J. J. O'Neill (3)	Dr. R. W. Hogg (4)
Dr. C. Farran-Ridge (2)	Dr. M. H. Sorokiewich (3)
Dr. J. T. Anderson (2)	Dr. A. E. Stenning (3)
Dr. B. W. Wibberley (4)	Dr. F. W. Stone (5)
Dr. H. J. Penny (4)	Dr. F. H. Looney (3)
Dr. A. D. Forbes (2)	Dr. J. Hughson (3)
Dr. M. J. Gallagher (1)	Dr. C. H. Lloyd (2)
Dr. E. Robertson (3)	Nurse G. A. Nye (1)
Dr. A. S. Anderson (3)	Nurse E. Mann (1)
Sister W. Solling (2)	Nurse E. A. Clarke (1)
Nurse E. Robinson (2)	Nurse M. Powell (1)
Nurse A. McKibbin (2)	Nurse I. E. Fincham (3)
Nurse E. Swannell (2)	Nurse I. R. Ross (3)
Nurse L. Beeby (2)	
Nurse M. Copeman (2)	

Nurse E. M. Graham (2)	Nurse S. Marron (3)
Nurse R. Orr (2)	Nurse E. King (3)
Nurse E. Blake (2)	Nurse E. V. Donaldson (3)
Nurse M. Pearson (2)	Nurse P. I. Wardle (3)
Nurse L. Backhouse (2)	Nurse M. Cumming (3)
Nurse B. Wallace (2)	Nurse C. Inglis (3)
Nurse E. Lowick (2)	Nurse M. Donellan (3)
Nurse M. E. Woods (2)	Nurse M. McL. Loughran (3)
Nurse N. Worrall (2)	Nurse E. M. Hargreave (3)
Nurse B. Coffey (6)	Nurse E. Doyle (3)
Nurse A. Florey (6)	Nurse L. A. Tobin (3)
Nurse W. Frost (4)	Nurse C. E. O'Shea (3)
Nurse A. Wilkinson (4)	Nurse K. Herriott (5)
Nurse K. L. Conway (4)	Nurse E. Hamilton (5)
Nurse E. B. Stacey (4)	Nurse M. Ward (5)
Nurse L. V. McManus (4)	Nurse J. Middleton (5)
Nurse D. M. Hook (4)	Nurse D. Craike (5)
Nurse W. S. Dodds (1)	Nurse E. McRea (5)
Nurse M. Wilson (1)	
Nurse B. G. Cheeseman (1)	
Nurse W. L. Chapman (1)	

According to the *London Gazette*, dated March 10, 1915, Lieutenant Eric Christian Lang, R.A.M.C., attached to the 1st Battalion, Leicester Regiment, was awarded the Distinguished Service Order, for conspicuous gallantry and devotion to duty on two occasions, while serving with the Expeditionary Forces. He is especially commended for his conduct at Rou du Bois on February 9, 1915, when he rescued a severely wounded officer under very difficult circumstances, whilst in full view of the enemy.

We learn that the New Zealand Branch of the British Medical Association has handed to the Dominion Minister of Defence the sum of £1,505, which has been collected by the various Divisions for the purpose of contributing to the cost of erection of the military hospital at Trentham. Further sums have since been received. It is stated that the erection of the hospital will be proceeded with shortly.

In view of the primitive construction of the Broadmeadows Field Hospital, and of the difficulties experienced in tending promptly and efficiently to the patients in this hospital, a semi-permanent hospital is to be taken into use within a few days. It is proposed that all medical cases should be treated in this hospital. The hospital, which was erected a short time ago, consists of large, airy huts, said to be well-equipped for their purpose. The new hospital will be under the charge of Major Maguire.

It is announced in District Order No. 39 of the 2nd Military District (New South Wales), under date April 23, 1915, that Captain H. H. Schlink, O.C., 40th A.A.M.C., will carry out the duties of Senior Medical Officer at Liverpool and Holdsworth Depôt Camps from April 13 until further orders.

Dr. Cudmore and Dr. de Crespigny, of Adelaide, have been appointed to the rank of Lieutenant-Colonel in the A.A.M.C.

Dr. W. Kent Hughes, of Melbourne, has offered his services to the Military Authorities, and will accompany the new Australian Hospital, with the rank of Major.

Dr. F. T. D. Clindening, a Sydney graduate, until recently practising in China, has been accepted for service with the Royal Army Medical Corps, in spite of having passed the usually prescribed age. Dr. Clindening will act in England.

Dr. D'Arcy Cowan, of Adelaide, is in charge of the radiological department of the General Hospital at Brocklehurst, at which the Indian troops are receiving treatment.

## Hospitals.

### THE ADELAIDE HOSPITAL.

The condition of the Adelaide Hospital has exercised the mind of the Hospital Board and the public for a considerable time. Attention to the subject has been called in these columns, and the opinion has been expressed that it would be bad finance to patch up the old building, instead of re-building it (see *The Medical Journal of Australia*, March 20, 1915, p. 276). On April 12, 1915, a deputation, consisting of a sub-committee of the Hospital Board, waited upon the Chief Secretary for the purpose of impressing on the Government the urgency of the case. The Chairman of the Board, Mr. W. G. Coombs, introduced the deputation and

summarized the position. In the course of his speech he said that it was essential that the accommodation in and the equipment of hospitals should be modern and of the best, in order that the physicians, surgeons and nurses might be able to carry out their work under favourable conditions. These favourable conditions did not exist in the Adelaide Hospital. In the first place, there was a serious lack of accommodation. It had become necessary to place patients on mattresses on the floor of the wards, and every available space had to be utilized. The number of beds in the hospital was 270, but at times they had had 340 patients in the institution. On occasions, as many as 20 women were kept waiting for admission for the operative treatment of urgent conditions. Noisy mental cases admitted for observation could not be placed in separate rooms, as they should have been. Mr. Coombs pointed out that no other city of the size of Adelaide was satisfied with one general hospital. In addition, special hospitals usually existed to relieve the pressure of the general hospitals. The Board had for many years considered the possibility of boarding-out patients suffering from chronic forms of disease, but there was no institution suitable for their reception. In an infirmary, these patients could be well looked after for about 17s. 6d. a week, whereas they cost £2 a week in the hospital.

Mr. Coombs, speaking for himself, did not think that it would be wise to rebuild the hospital at the present time, on account of the great cost. In London, it had been found that the building and equipment of a modern hospital cost £1,000 a bed, while other hospitals had been erected recently at a cost of from £400 to £600 per bed. He believed that additional floors could be added to the existing building at North Terrace, and other alterations undertaken at a reasonable cost, and in this way the institution could be brought up-to-date. The lighting, heating, balconies, lifts and theatre accommodation would have to be re-constructed or installed. On the other hand, it was essential that a new out-patients' department should be built.

With some diffidence, Mr. Coombs suggested that the Victorian architect, who had visited England and America for the purpose of studying modern hospital construction, and who had erected a most up-to-date hospital in Melbourne, should be consulted as to cost and other requirements. He referred to the financial side of the question, and pointed out that the Martin bequest should not be touched until the outstanding leases fell in, which would not be for another 20 to 50 years. The Charity Commissioners had received a sum representing £32,000, which should be used as a start for the cost of alterations and additions.

Dr. R. S. Rogers, while agreeing with the main part of what the Chairman had said, spoke in favour of new construction, and suggested that the expert selected should be asked to advise whether alterations of existing buildings should be undertaken or a new hospital erected.

Mr. E. W. Nicholls spoke chiefly on the advisability of the provision of an infirmary to which patients with chronic affections could be referred.

Dr. W. T. Hayward said that the authorities had recognized nearly a quarter of a century ago that the hospital had seen its best days. Since that time, thousands of pounds had been spent, but with the exception of the money sunk in the bacteriological department and the mortuary, it had been badly spent. He advised that as much of the hospital should be re-built as the money available would allow. He was convinced that to convert the existing premises would be to spend money badly. In the new buildings arrangements should be made for all scientific adjuncts found in modern hospitals, and what remained of the old hospital should be utilized until it could be pulled down and replaced by new premises.

Councillor E. Frinsdorf was in favour of a new building, and called attention to the fact that many of the private hospitals in Adelaide were better equipped and constructed than the Adelaide Hospital. He expressed the hope that the Government would place £200,000 to £300,000 on the estimates for the erection of a new hospital.

Mr. T. B. Merry urged the Chief Secretary not to entertain a scheme for the alteration of the existing hospital.

In his reply, the Chief Secretary, who was at one time a member of the Hospital Board, said that it was easy for him to agree with what had been said. Something had to

be done, and the sooner a start was made, the better. He could not express an opinion as to whether it would be better to alter and add to the existing hospital or to build a new one until he had consulted an expert. The financial aspect of the problem must not be forgotten, and if he found that it was possible to erect a new institution, he would be the better pleased. He would consult an expert first, possibly one from the neighbouring State, if an equally good man could not be found in South Australia.

#### ROYAL ALEXANDRA HOSPITAL FOR CHILDREN.

We have received a copy of the annual report for the year 1914 of the Royal Alexandra Hospital for Children, Sydney. This report, unfortunately, does not contain the medical report, which will be issued at a later date.

It appears that the hospital has continued its good work throughout the year, and is able to show a good record from a medical point of view. The total number of children under treatment in the wards amounted to 2,497. In addition to these in-patients, 11,500 casualties, and 17,186 out-patients received attention.

During the course of the year 22 cots have been endowed, one in perpetuity and 21 by annual donations of £30.

In the section dealing with administration, reference is made to the death of Mr. Norman Shelley, one of the Directors of the hospital. A number of individuals and bodies receive the thanks of the Board for various offices performed in connexion with the year's work. The Honorary Medical Staff and the Matron and Nursing Staff are also thanked warmly for their valuable assistance.

In the Diphtheria Department, 446 patients were treated, and 40 patients died. This is equivalent to a case mortality of 8.96%. It is, of course, impossible to gauge the significance of these figures in the absence of a record of the day of the disease on which the treatment was instituted. It is stated that smaller doses of antitoxin are being administered, since it has been found that small doses are just as effective as large ones. We anticipate that justification for this statement will be given in the medical report.

A brief statement is appended on the work carried out in the out-patients' department, and in the massage department and gymnasium. The details are directed to the subscribers, and have no interest to the medical profession.

In regard to the financial statement, it appears that the amount contributed by the public was £12,378, and that interest on investments and rent and sundries brought in a further £1,663, making a total of £14,041. To this the Government's subsidy of £5,680 is to be added, to complete the revenue of £19,721. The Government therefore contributes only 28.8% of the income of this hospital. The statement is made that the Government subsidy has been increased from £4,500 to £7,000 per annum. The expenditure amounted to £18,674. This works out at a cost of £7 9s. 6d. per patient.

The report concludes with a short account of the Doll's Carnival, which resulted in the reception by the hospital of £1,700, the Passion Play Recital, by which the hospital benefited to the extent of £147, and of the work of the Suburban Cot Fund Committee.

A special appeal is made in advance for the current year, in anticipation of an increase amount of work, due to unemployment.

#### Obituary.

##### SIR GEORGE TURNER.

The death of Sir George Turner, M.B., which took place early last month at Colyton, Devon, England, at the age of 79 years, marks the close of a life of devotion to duty and industry in the cause of science. Sir George was an ornament to his profession, and his whole career was marked by distinction only attained by a conscientious worker and a capable student. His achievements during the past 20 years have brought him prominently before the public. In 1895, he was appointed Medical Officer of Health of Cape Colony. Soon after he took up his duties, rinderpest broke out with considerable violence, and the health department was exercised in its mind as to the means of coping with this scourge. Koch was at that time working in Africa on



this disease, and had started a series of experiments, with a view of obtaining a serum by inoculation. Turner took up the work shortly after, and, as a result, he produced a serum which exercised a temporary prophylactic action. Later he succeeded in combining active with passive immunization, and this resulted in a complete stamping out of rinderpest in the Colony. The Cape Colony Government, in the most short-sighted manner, decided to interrupt his work, and closed his laboratory, effectively preventing him from preparing supplies of his virus. Cecil Rhodes, however, on learning of the need for a continuous supply, especially in Rhodesia and Egypt, supported the laboratory for four months out of his private means.

When the Boer War broke out, Turner volunteered, but his services were refused on two occasions. Later, however, Lord Roberts approached him for the purpose of supervising the military hospitals and concentration camps, on account of the serious outbreaks of enteric fever. In 1901, rinderpest again appeared, and this time Lord Kitchener sought Turner's help. The old station was re-opened, and the immunizing vaccine was again produced in large quantities. It was sold to Natal and also to Egypt. Within 12 months the disease was stamped out for the second time.

On the conclusion of this work he settled in Pretoria, and took up the investigation of leprosy among the Dutch and native patients in the local asylum. In 1907 he was forced to retire from the public service, on having reached the age limit. He returned to England, and there continued his leprosy researches. After some years' patient and excellent work, he discovered that he had contracted leprosy, from which he ultimately died. The medical profession may well be proud of a man with such a record as Turner's.

### Correspondence.

#### WORKERS' COMPENSATION ACT, VICTORIA.

Sir,—In your issue of March 27th, 1915, p. 299, in a memorandum on the Victorian Workers' Compensation Act, 1914, mention is made of the following industrial disease specifically named in Schedule 3 of the Act, namely, "septic poisoning arising from handling meat or meat products, or its sequelæ."

As anthrax is also specifically mentioned as an industrial disease in the same schedule, I fail to understand the meaning of this further industrial disease, termed "septic poisoning," as connected with the handling of meat or meat products.

As a bacteriologist who has had a good deal of experience in connexion with meat inspection in Australia, I am unaware of any special liability of workers in the meat supply to suffer from septic poisoning of any kind due to the nature of their work, and not incidental to other members of the community as well. Animals taken for slaughter to abattoirs are in prime health and condition, and there is no known condition apart from anthrax associated with handling the meat of such animals, even though this be undergoing putrefactive changes. It is possible that septic poisoning—that is, septic infection—might arise from a cut inflicted during a post-mortem, for instance, on a cow which had died from puerperal septicæmia, or some profound septic process, but the likelihood of such a case reaching the abattoirs in Australia for the purpose of supplying food for the community is, I think, highly remote.

It is of course possible that butchers, through carelessness, may be liable to cut themselves with sharp knives whilst dressing the beast, and that such cuts may be infected by pathogenic organisms apart from their work at the abattoirs, but I hardly think that such circumstances should be considered as "septic poisoning arising from handling meat or meat products."

I think it right to call the attention of the profession to the insertion of this so-called industrial disease in Schedule 3 of this Act, before any case possibly hinging upon it may come under notice. I think, further, that this question should be decided one way or the other by the profession, after receiving such evidence as may seem necessary, before any case appears in the Court, when diverse medical evidence may throw discredit on our professional opinions.

In my opinion, founded on experience, the insertion of this disease is unjustified, inasmuch as it does not exist and its continuance in the Schedule is likely to open a way to fraudulent exploitation by careless or scheming individuals.

Yours faithfully,

J. BURTON CLELAND.

93 Macquarie Street, Sydney,  
April 16, 1915.

We understand that the inclusion of "septic diseases" in Schedule 3 of the Workers' Compensation Act was undertaken for specific reasons. The clause reads:—*Any work involving the handling of meat or the manufacture of meat products or any by-products in connexion with the trade of a butcher or slaughterman.* It appears that representations were made by the Slaughtermen's Union that poisoned hands were very common among their members, even in the absence of cuts. It is suggested that the most common cause of these wounds is the presence of seeds, especially of the Bathurst Burr, in the hides of the sheep. The prickles of the seeds are said to work their way through the hides into the subcutaneous tissue and muscle, and that in the process of skinning these animals, the prickles enter the hands of the workers and set up poisoning. In view of the impossibility of proving the occurrence of a preceding accident, it was considered necessary to classify "septic poisoning" among the industrial diseases for the purposes of the Act. We are also informed that the draftsmen of the Act were instructed to protect all persons suffering from pathological conditions arising in the course of their occupation. It must be recognized that any cut may be infected at a later date, apart from the process used in the work, but the Act provides safeguards against claims being made for compensation in cases in which the infection does not occur in the course of employment.

#### RE-GROWTH OF ADENOIDS.

Sir,—I am glad to have the experienced support of Dr. Brady in my contention that adenoids do not recur. Besides the points brought out in his letter, may I reiterate my statement that adenoids are often supposed to recur because the posterior ends of the inferior turbinate enlarge. I remove these now as a routine, except in young children, and if in these the posterior ends are felt to be swollen, it is quite wrong to leave them. True it is that they will collapse temporarily after removal of adenoids, but very soon, as a rule, they will cause symptoms which suggest re-growth of adenoids.

Yours, etc.,

W. KENT HUGHES.

Melbourne Hospital, April 26, 1914.

### Personal.

The Premier of New South Wales announced on April 27, 1915, that the Honourable Frederick Flowers had resigned his positions as Vice-President of the Executive Council and as Minister of Public Health, and that he had been appointed to the office of President of the Legislative Council. The Chief Secretary, Mr. Black, has been appointed Minister of Public Health, and Mr. Fitzgerald has been given the office of Vice-President of the Executive Council.

Dr. Arthur F. Davenport has resumed practice at St. Kilda, Victoria.

Dr. J. P. Wilson has been nominated for re-election to the Council of the University of Melbourne. Dr. Wilson is one of the retiring members of the Council.

At a meeting of the Medical Board of Victoria, held on April 20, 1915, it was resolved to place on record the high appreciation of the Board of the services of Dr. George Moore, the late President, both to the Board and to the State. At the same meeting, Dr. A. S. Joske, of Prahran, was elected to the office of President.

Dr. and Mrs. G. W. Lynch, of Suva, arrived in Sydney on April 23, 1915, on a visit.

Mr. Neil Bickle, the son of Dr. L. W. Bickle, late of Adelaide, has been promoted to the rank of lieutenant on the cruiser "Ambrose."

Dr. Isabel Ormiston, who has been on active service in Flanders, accompanied by Dr. Elsie Dalzell, has gone to Serbia to act as pathologist in a field hospital. Dr. Ormiston has been mentioned in the despatches for conspicuous bravery and devotion to duty.

Dr. E. W. Morris, the President of the South Australian Branch, who is acting as Medical Officer with the Australian Naval Bridge-Building Expedition, has left for Melbourne for the purpose of embarking for Europe. On April 21, 1915, he was accorded a farewell dinner by the members of the Royal South Australian Yacht Squadron, of which he is Commodore. Appreciative speeches were delivered and Dr. Morris replied, referring to a presentation which had been made to him on the occasion, which he said would always remind him of the donors.

Sir Thomas Anderson Stuart has been re-appointed Dean of the Faculty of Medicine of the University of Sydney for a further period of two years. He has also been re-elected a Fellow of the University Senate.

### Medical Appointments.

The Executive Council of New South Wales have announced the following appointments: Dr. R. R. P. Sterr Bowker to be Government Medical Officer at Grenfell; Dr. Q. Ercole, to be Government Medical Officer at Grenfell; Dr. F. P. Quirk to be Government Medical Officer at Condo-bolin. The two first-named are members of the New South Wales Branch of the British Medical Association.

Mr. J. W. Blair, Dr. Aeneas McDonnell, and Mr. G. Wool-nough were appointed on April 22, 1915, members of the Senate of the Queensland University. The three vacancies were created by the death of Mr. A. H. Barlow, and by the resignation of Dr. Eugen Hirschfeld and Sir William MacGregor.

Dr. Douglas Rodger, of Brisbane, has been re-appointed Ophthalmic Inspector to the Department of Public Instruction of Queensland for a further period of two years.

The following appointments to the staff of the Alfred Hospital, Melbourne, have been announced: Medical Superintendent, Dr. C. A. Stewart; Senior Resident Medical Officer: Dr. G. P. O'Day; Junior Resident Medical Officers: Drs. E. M. G. Glassford, K. R. Moore, S. W. Shields and P. N. Whitehead.

The Executive Council of Queensland, at their meeting of April 22, 1915, appointed the following nominees of the Queensland Medical Board to the positions of members of the Nurses' Registration Board of Queensland: Dr. Henry Byam Ellerton, Inspector of Asylums for the Insane and Medical Superintendent of the Hospital for the Insane at Goodna; Dr. J. Mowbray Thomson, and Dr. J. Barr McLean.

Dr. W. C. Faulkner, of Sunbury, Victoria, has been appointed Medical Officer of Health of the West Riding of Meltonshire. Dr. E. L. Bartlett has been appointed acting Medical Officer of Health for the East Riding during the temporary absence of Dr. Faulkner.

### Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xiii.

Medical Journal of Australia, Assistant (part-time).  
Hospital for Sick Children, Brisbane, Two Resident Medical Officers.

Marrickville Cottage Hospital, Honorary Medical Officer.  
Royal North Shore Hospital of Sydney, Resident Medical Officer.

Royal North Shore Hospital of Sydney, Honorary Anaesthetist.

### Diary for the Month.

- Apr. 30.—Melbourne Hospital Clinical Society.
- Apr. 30.—N.S.W. Branch, B.M.A., Ordinary.
- May 5.—Vic. Branch, B.M.A., Monthly.
- May 5.—Cent. South. Med. Association (Bowral).
- May 5.—Cent. West. Med. Association.
- May 7.—Q. Branch, B.M.A., Monthly.
- May 11.—Tas. Branch, B.M.A., Monthly and Council.
- May 12.—Melbourne Pædiatric Society.

- May 13.—Vic. Branch, B.M.A., Council.
- May 14.—S. Aus. Branch, B.M.A. Council.
- May 14.—N.S.W. Branch, B.M.A., Clinical Evening.
- May 18.—N.S.W. Branch, B.M.A., Executive and Finance Committee, Ethics Committee.
- May 19.—W. Aus. Branch, B.M.A., Monthly.
- May 19.—Vic. Branch, B.M.A., Clinical Meeting.
- May 19.—W. Suburbs Med. Association, Clinical Evening.
- May 20.—North-Eastern Medical Association (Bangalow).
- May 21.—Q. Branch, B.M.A., Council.
- May 25.—Vic. Branch, B.M.A., Eye and Ear Section.
- May 25.—N.S.W. Branch, B.M.A., Organization and Science Committee, Medical Politics Committee.
- May 26.—Vic. Branch, B.M.A., Council.
- May 27.—S. Aus. Branch, B.M.A., Monthly.
- May 28.—N.S.W. Branch, B.M.A., Ordinary.
- May 29.—Melbourne Hospital Clinical Society.

### Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
<b>QUEENSLAND.</b> (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute. F.S. Lodges at Longreach.
<b>WESTERN AUSTRALIA.</b> (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A.
<b>NEW SOUTH WALES.</b> (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Australian Natives Association. Balmain United F.S. Dispensary. Burwood District F.S. Institute. Canterbury United F.S. Dispensary. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows Med. Inst., Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. N.S.W. Ambulance Association and Transport Brigade. N. Sydney United F.S. People's Prudential Benefit Society. Phoenix Mutual Provident Society. F.S. Lodges at Braidwood. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Mudgee. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Penrith, and Auburn. F.S. Lodges at Wellington. Killingworth Colliery, Newcastle. Seaham Colliery No. 1, Newcastle. Seaham Colliery No. 2, Newcastle. West Wallsend Colliery, Wallsend.
<b>SOUTH AUSTRALIA.</b> (Hon. Sec. 3 North Terrace, Adelaide).	The F.S. Medical Assoc. Incorp., Adelaide.

### EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to "The Medical Journal of Australia" alone, unless the contrary be stated. All communications should be addressed to "The Editor," "The Medical Journal of Australia," B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.

The following periodicals are required by the Librarian of the New South Wales Branch of the British Medical Association to complete the series for binding. Members who have borrowed these journals are requested to return them as soon as possible.

Lancet, November 7, 1914.  
Lancet, November 14, 1914.